

**An exploration of the ways in which people with auditory hallucinations  
relate to their voices**

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## ABSTRACT

An exploration of the ways in which people with auditory hallucinations relate to their voices

Mark Ian Hayward

Research suggests that responses to the experience of voice hearing (auditory hallucinations) can be mediated by; (1) beliefs about the voices; (2) core beliefs about the self; and (3) the social significance of utterances. What each approach has in common is the extent to which the voice/s can be experienced in relation to the self as an interpersonal 'other'. Recent attempts to explore the relationship the voice hearer has with the voice/s have focused upon the power differential between the two or paid insufficient attention to the broader context of social relationships. Within this study, a new theory of relating (Birtchnell, 1993,1999) was deployed to more fully understand the relationship between the voice hearer and the voice/s. Specifically, the relationship was explored with respect to power and proximity and the extent to which it mirrored relating in the hearer's social world. Twenty seven voice hearers completed measures of relating to the voice and general relating style. Mirroring was found on both poles of the power axis and on one pole of the axis of proximity. In each case the relationships were independent of beliefs about voices and mood-linked appraisals. These results suggest that the same processes that affect social relationships may be influential in determining how the hearer relates to the voice/s. One exception to the mirroring of relationships concerned the way in which voices were related to more distantly. Clinical implications from the findings are considered at the level of assessment and intervention. An assessment of the way the voice is related to may indicate the type of intervention that is most likely to engage the hearer. Possible interventions may include the identification of the voice and the modification of general relating tendencies.

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## INTRODUCTION

Auditory hallucinations are experienced by people with and without a history of psychiatric difficulties. Often referred to as 'hearing voices', the experience has been described as a personal and powerful one that is capable of eliciting a range of emotional and behavioural responses. The voice content may be abusive and critical and lead to emotional distress and an increased risk of suicide, or may be pleasant, lead to reassurance and be courted. Over the past 30 years an understanding has developed of some of the psychological factors which may be involved in the mediation of these varying responses. One factor that is receiving increasing attention is the extent to which the voice may be related to as an 'other', in ways similar to the relationships that can exist between 'real' people.

The aim of this study will be to extend the psychological understanding of the ways in which people experience their voice/s in relation to themselves. Specifically, a new theory of relating will facilitate an exploration of the relationship between the voice/s and the voice hearer, and the extent to which this relationship is similar to the ways in which the voice hearer relates to people within his/her social environment. Sampling issues will restrict this exploration to the relationships experienced by individuals who engage with mental health services. However, links to the wider population of voice hearers will be made where appropriate.

This introduction will begin with a consideration of the role of meaning in mediating responses to voices. It will be suggested that a common theme amongst mediators is the concept of relationship with the voice. The limited application of interpersonal theory to this relationship will be critiqued with regard to the complexity of the methodology employed and a preoccupation with power. A case will be made for the use of a more accessible theory of relating that considers relationships from the perspective of both power and proximity. Previous applications of this theory to the experience of voice hearing will then be reviewed prior to a consideration of the relationship with the voice in the context of relationships more generally. Finally, the clinical relevance of exploring

auditory hallucinations within a relational framework will lead to a full statement of the questions to be addressed by this study.

### Defining voices

Auditory hallucinations have been defined as:

Any percept-like experience which (a) occurs in the absence of the appropriate stimulus, (b) has the full force or impact of the corresponding actual (real) experience, and (c) is not amenable to direct and voluntary control by the experiencer (Slade & Bentall, 1988, p.23).

They may take the form of noises, music, single words, utterances or an ongoing dialogue. 'Voices' are experienced in the latter three ways and are defined as auditory hallucinations that are perceived as someone talking (Chadwick, Birchwood & Trower, 1996). Hallucinations, particularly in the auditory modality, have traditionally been associated with major psychiatric disorder, predominantly schizophrenia. They are one of the defining features of schizophrenia in current systems of diagnostic classification, e.g., DSM IV (American Psychiatric Association, 1994) and are reported to occur in approximately 60% of 'cases' (Slade & Bentall, 1988).

### The case for considering responses to voices

There is a consensus amongst aetiological theorists that auditory hallucinations arise from the misattribution of private mental events to an external source. Often-cited experimental evidence in support of this consensus includes demonstrations that hallucinations are accompanied by sub-vocalisation (e.g., Green & Preston, 1981), as is most 'inner speech' (Cacioppo & Petty, 1981), and are blocked by concurrent verbal activity (e.g., Margo, Hemsley & Slade, 1981). However, there is less agreement about the cognitive processes that are involved

in such misattribution. Some theorists advocate for a bottom-up model whereby a deficit in cognitive functioning may limit an individual's awareness of the extent to which mental events are internally generated (Frith, 1987; Hemsley, 1993). Others locate hallucinations on a continuum with normal cognitive functioning and suggest that information processing is biased through the involvement of top-down processes such as beliefs and expectation (Bentall, 1990, Morrison, Haddock & Tarrier, 1995; Morrison & Baker, 2000).

As the aim of psychological intervention is to ameliorate distress and social handicap, the pertinent question has evolved from 'what causes auditory hallucinations?', to 'how and why do people respond as they do?'. A diverse range of behavioural and emotional responses are reported to accompany the experience of hearing voices (Nayani & David, 1996) and the challenge to researchers is to seek an understanding of the factors which mediate these differing responses. This introduction will consequently consider the ways in which researchers have sought to develop such an understanding and the extent to which aspects of the hearer's life history and psychological vulnerability have been attributed a central rôle in the mediation of responses to auditory hallucinations.

### Mediation of responses to voices

This study proposes that the responses of voice hearers to their voice/s are, to some extent, influenced by the way in which the hearer relates to the voice/s and to people within their social world. Prior to a consideration of the possible role of relating, the research literature will be reviewed with respect to three variables that have been demonstrated to be influential in the mediation of responses to voices: beliefs about voices; beliefs about self; and social context. Each of these will be considered in turn, beginning with beliefs about voices.

### Beliefs about voices

The opportunity to explore the meaning attributed to the experience of voice hearing was taken by Chadwick and Birchwood (1994) as they sought empirical support for a cognitive model of voices. Drawing on Milgram's (1974) famous experiments (in which participants' decisions about whether to administer what they thought to be lethal electric shocks was influenced by beliefs about the experimenter's power and their own degree of control) and Beck's (1976) cognitive model of emotional disorders, Chadwick and Birchwood (1994) suggested that, rather than driven by the content or topographical features of their voices, the responses of individuals may be more understandable with reference to their appraisals of them.

Chadwick and Birchwood (1994) reported data from 26 participants and, consistent with their hypotheses, emotional and behavioural responses to voices were incongruent with content in 31% of participants, e.g., a voice called one participant a fool and told him to commit suicide and yet was construed as benevolent. Greater consistency of response was reported on the basis of beliefs about presumed identity, power and purpose: voices believed to be malevolent (punishment for previous misdemeanour, unjustified persecution) provoked negative emotions and were resisted; voices believed to be benevolent (helping to maintain mental well-being, protection from malevolent voices, advisory role; development of special powers) provoked positive emotions and were engaged with.

The need to establish the reliability and validity of the concepts of malevolence, benevolence, resistance and engagement was recognised by Chadwick & Birchwood (1995) who developed the Beliefs About Voices Questionnaire (BAVQ). Consisting of 30 items assessing cognitive (e.g., "My voice is punishing me"), behavioural (e.g., "When I hear my voice I usually shout back at it") and affective (e.g., "My voice frightens me") reactions to voices, the BAVQ required a simple response of 'yes' or 'no'.

The BAVQ was used by Birchwood & Chadwick (1997) in a study that sought to test the validity of the cognitive model. Data was gathered from a further 62 voice hearers and the findings were interpreted as additional evidence for the model of cognitive mediation. Coping behaviour and affective responses were not driven by voice form, content or topography; only when beliefs about the voices' purpose were considered was affect and behaviour meaningful. In nearly three quarters of the participants (72.5%) such beliefs were not related to content (or an "inference" from content was needed to "establish" the belief).

A number of criticisms have been made of Chadwick & Birchwood's (1994; Birchwood & Chadwick, 1997) cognitive model of voices: attempts to corroborate and replicate findings have not been successful; the role of power in mediating responses to voices remains unclear; and concerns have been expressed about the extent to which methodological limitations restrict the interpretation of the results from the '97 study. Each of these criticisms will now be considered.

#### Criticisms of the cognitive model

An attempt to replicate the findings of Chadwick & Birchwood (1994) was made by Close & Garety (1998). Using the same semi-structured interview schedule, Close & Garety assessed the voices of 30 participants. Their findings did not corroborate those of Chadwick & Birchwood (1994) with respect to the incongruence between voice content and beliefs about the voices: voices with positive content were seen as benevolent and those with negative content were seen as malevolent. Birchwood & Chadwick (1997) suggested that their cognitive model would allow for such a possibility (as it does not imply the absence of a link between triggering events and beliefs). However, its occurrence in 100% of cases was suggestive of a more pivotal role for the content of voices (such a possibility was explored by Thomas (1997) and will be considered at a later point in the introduction). Patterns of resisting the malevolent voice and engaging with the benevolent voice were not dissimilar across samples. However, an important difference between the samples was the extent of the negative affect in Close & Garety's sample, which was not dependent upon the belief as to the voice's

malevolence or benevolence. This point will be expanded upon in the section on *beliefs about self*.

A further difference between the samples of Chadwick & Birchwood (1994) and Close & Garety (1998) concerned the number of participants who were uncertain about the voice's intent or who believed the voices to be both malevolent and benevolent (46% and 30% of samples, respectively). Close and Garety (1998) interpreted this finding as evidence that 'The specific categories identified by Chadwick & Birchwood do not appear to encapsulate the whole range of beliefs about voices identified by those who hear voices' (p.185). This criticism was partially addressed by Chadwick, Lees & Birchwood (2000) through the development of a revised version of the BAVQ (see methods section for a more detailed review of this measure). By moving from a dichotomous response scale ('yes' or 'no') to a four point likert scale ('disagree' to 'strongly agree'), the authors argued that the BAVQ-R would be able to detect small individual differences and subtle changes over time that were previously missed by the BAVQ.

A second weakness of the BAVQ that was addressed by Chadwick, Lees & Birchwood (2000) concerned beliefs about the power of the voice. Despite claims about the importance of voice power or omnipotence, the explanatory power of the cognitive model of voices is at its weakest when applied to the mediation of responses to command hallucinations. Responses to commands or imperative voices were first investigated by Chadwick & Birchwood (1994). They reported that it was the severity of the command (voice content), and not beliefs about the voice's malevolence or benevolence, that was the single most important determinant of compliance: compliance with mild commands was commonplace, yet there was no compliance with life-threatening commands. Compliance with only mild commands was interpreted as an attempt to appease the voice's requirement for sterner action, a reticence to carry out such action being regulated by other considerations, e.g., people asking themselves the question: "What if my beliefs about the voices are wrong?".

The ability of additional beliefs, other than those about the voice, to influence the likelihood of complying with command hallucinations is commented

upon by Beck-Sander, Birchwood & Chadwick (1997). Reporting findings from 35 participants, their analysis of qualitative data illustrated a role for beliefs about the identity of the voice, the consequences of transgression, the effectiveness of compliant action in achieving a valued goal and the social acceptability of the action. A further anomaly with respect to the power of the voices was reported by Birchwood & Chadwick (1997) who, rather paradoxically, found that participants' belief in the power of the voice had little impact upon their ability to 'call up' or modify voice content, e.g., 70% of those rating their voices as powerful reported that they could stop them by using distraction or concurrent verbalisation. The response of Chadwick, Lees & Birchwood (2000) to this weakness of the cognitive model was to extend the single question on the BAVQ relating to power to a six question sub-scale measuring a construct of voice omnipotence incorporating aspects of the voice's power, omniscience and controllability. Newman Taylor (1998) argues that the variable of greatest influence is not the perceived power of the voice per se, but the relative difference in power that exists within the relationship between the voice hearer and the voice. This issue will be examined in greater detail at a later point.

The methodological limitations of Birchwood & Chadwick's (1997) study are highlighted by Newman Taylor (1998) who draws attention to the limited interpretations that can be facilitated by statistical analysis. Birchwood & Chadwick (1997) claim that their findings of 'no significant differences' in voice topography/form/content between participants who held different beliefs about their voices provide evidence that beliefs do not arise directly from voice content. Such an interpretation has no theoretical basis as an insignificant result merely indicates a failure to establish a relationship, not proof that no relationship exists. Newman Taylor (1998) concludes that the claims of Birchwood & Chadwick (1997) be restricted to claims for the significance of beliefs rather than the lack of significance of voice activity.

The above criticisms of Chadwick & Birchwood's (1994; Birchwood & Chadwick, 1997) cognitive model of voices do not detract from the model's central tenet: that emotional and behavioural responses can be mediated by beliefs about the voices. Indeed, there is a growing body of evidence from outcome

research to suggest that the therapeutic targeting of such beliefs can considerably reduce the distress associated with the hearing of voices (see Haddock, Bentall, Slade, Reid & Faragher, 1998, for a review). What the criticisms do suggest is that voice hearers' relationships with their voices do not seem to be straightforward. There may be factors other than beliefs about the voice's purpose and power that play a role in determining the ways in which a voice is responded to. It is to a consideration of two such factors that this introduction will now turn.

### Beliefs about self

Close & Garety (1998) were interested in the possible role of self-appraisals and self-esteem in mediating responses to voices. Drawing on research into psychotic symptoms which has posited a role for delusions as psychological defences capable of protecting vulnerable self-esteem against negative self-evaluations (Bentall, 1994), they sought to explore Chadwick et al's (1996) proposal that beliefs about voices (which are formally speaking secondary delusions) can function in a similar way. Self-appraisals activated by the voice were accessed via thought chaining and categorised as positive (e.g. 'I'm beautiful'), negative ('I'm worthless) or neutral ('I'm secure in this country'). Of those who accessed an appraisal of the self, 88% were negative. Self-esteem was measured using the Self-concept Questionnaire (Robson, 1989) and was found to be predominantly low.

The relationships between negative affect, self appraisal and self-esteem were explored. Eighty two percent of those with negative affective responses to the voice had negative self-appraisals. Of the 19 participants with negative self-appraisals, 16 (84%) had low self-esteem. Twenty five participants provided affective responses and self-esteem scores. All 25 had negative affect in response to the voices and the self-esteem score was low for 19 (76%). This picture of accessible and low self-esteem, in comparison to those with paranoid delusions, was less evident of a role for voices in defending against low self-esteem.

Close and Garety interpreted their findings with recourse to a cognitive model of depression (Beck, Rush, Shaw & Emery, 1979) and more recent



suggestions that affect can strengthen cognitions through reciprocal relationships (Gilbert, 1984):

It could be that numerous years of hearing voices, with their persistence and the lack of ability to exercise control over them, have activated beliefs about the self as, for example, useless, which leads to a negative affect, which in turn has induced resignation (to the beliefs about the voice's purpose) and a sense of helplessness (Seligman, 1975), so adding to a predominantly negative affect to the voices (Close & Garety, 1998, p.185).

From an aetiological perspective, Close & Garety (1998) suggest that a cognitive model of voices drawing from a model of depression may be compatible with the consensus that voices result from the misattribution of internal mental events to an external source: consistent with the role of negative automatic thoughts in depression, inner speech processes may serve to activate core beliefs about the self. Close & Garety's inclusion of Seligman's theory of helplessness may consequently have been an attempt to explain the difference between their results and those of Chadwick & Birchwood (1994) with respect to the pervasiveness of negative affect. If the duration of voice hearing in the former sample was considerably longer (information about the sample of Chadwick & Birchwood, 1994, was not available to Close and Garety), the helplessness induced by persistent exposure to a voice perceived as uncontrollable may have strengthened beliefs about the self as useless, worthless and helpless, thereby enhancing negative affect.

#### The social context of voices

Thomas (1997) was concerned about the extent to which attempts to understand the experience of voice hearing were preoccupied with processes which are an intrinsic property of the individual. What is not conveyed, he states, is the significance of the relationship between the individual and the social world in which the person is embedded. In an attempt to go beyond inward-looking, individualistic constructions he draws upon the work of Mead (1934) and Bakhtin (1986, both cited in Thomas, 1997).

Mead proposed that 'significant speech' was used to talk to ourselves as we would talk to another person:

In this way we are able to respond to self as another would respond to us, and participate in our own conversations with others.....these processes lie at the heart of self awareness, processes which involve the planning, organising and monitoring of our social relationships with others, through our use of language. In this way we encourage, censure, warn, cajole, love and hate ourselves, and at the same time engage in all these features of relationships with other people (Thomas, 1997, p.193).

The social significance of a reflexive self refers to the processes by which self can relate both as a subject and object to itself. Mead argues that such a possibility only exists through the indirect experience of ourselves from the viewpoints of others. In this way, self is mirrored by others in the social world and it is this 'others' view of ourselves ('generalised other') which is internalised and with which the self ('I') establishes a dialogue.

For Bakhtin, the relationship between social context and language is more direct. Claiming that linguistics alone (the grammatical structure of language and its logical properties) is incapable of conveying the significance of language between two speakers, he suggested that each word we used is already marked by its history, bearing the accent of its previous uses. Each time we speak, our utterances exist only in relation to what has been said before, within both the immediate and past contexts.

The work of Mead and Bakhtin set a context for understanding the way in which voices may be identified as 'other(s)' in the self with whom a dialogue is established, such a dialogue being connected to and influenced by aspects of the hearer's past and present social relationships. Thomas (1997) states that this has two consequences: the conversations between voice hearers and their voices should have similar pragmatic properties to the conversations that take place between individuals on a daily basis; and these dialogical properties can be used

to help the hearer understand the significance and meaning of voices in the context of his/her life experience.

On the basis of the above ideas Leudar, Thomas, McNally & Glinski (1997) hypothesised that voices would be individuated and their utterances would bear the pragmatic features of everyday conversations. Using a semi-structured interview, data was collected from 28 voice hearers (14 people with a diagnosis of schizophrenia and 14 students not in receipt of psychiatric services) and, consistent with hypotheses, two thirds reported voices that were aligned with significant individuals in their social world (on the basis of similarity, not identity) and voices exhibited the pragmatic features of directing, evaluating and questioning the hearer. Moreover, the responses of some of the hearers gave the experience an interactive quality: verbally, as voice hearers both asked and responded to questions; and behaviourally, as the voices responded to and regulated the activities of the hearer.

### Relationship with voices

Whether the mediation of responses to voices is attributable to voice content, beliefs about the voices or beliefs about the self, what is apparent from the writings of Chadwick & Birchwood (1994; Birchwood & Chadwick, 1997), Thomas (1997) and Close & Garety (1998) is the extent to which voice hearing can be experienced in relation to the self. Chadwick, Birchwood & Trower (1996) take this possibility one stage further by stating that:

Individuals experience their voices not as their own thoughts, but attribute them to others. Consequently it is possible to view an individual's relationship with a voice as interpersonal, and indeed the relationship shows many of the dynamics common to ordinary relationships (p.106).

Just as one adopts a position in relation to another in any interpersonal relationship, so Chadwick et al (1996) suggest that the position taken by the voice hearer is relative to an 'other' (the voice) who can be perceived as all powerful

(omnipotent) and all knowing (omniscient). The reciprocal nature of the relationship between voice hearer and voice may be most evident with respect to omniscience. Nayani & David (1996), reporting on their phenomenological investigation of 100 voice hearers, wrote that 'a sense of personal intimacy was conveyed, both by the patient's knowledge concerning the voice, but moreover, of the voice's knowledge of the patient' (p.186). In an attempt to develop a working relationship between conflicting interests ('modus vivendi': the voices perceived desire for power versus the hearer's desire for control), Birchwood & Chadwick (1997) suggest that the acceptance and development of intimacy with voices may lower the hearer's distress and form part of an investment that may lead to the production of positive voices to offset negative ones. This proposal was an attempt to understand the finding that omniscience was reported to a greater degree amongst those with benevolent beliefs about their voices, and was consistent with Nayani & David's (1996) suggestion that hearers should be taught to create new voices to dilute the early distressing phenomena. However, an increase in intimacy may come at a cost. Birchwood & Chadwick (1997) reported an unexpectedly high degree of negative affect for individuals with benevolent beliefs, a finding that is consistent with Benjamin's (1989) proposal that investment in voices may lead to psychological incapacity in terms of loss of privacy and confidence.

If the relationship that the voice hearer develops with their voices can be construed as an interpersonal phenomenon and individuals respond differently to the experience (both emotionally and behaviourally), are there factors, other than the above mentioned mediators of responses, that influence this relationship? A strong theme running through the literature is the extent to which the experience of voice hearing reflects the individual's experience of (difficult) interpersonal relationships in the 'real' world (e.g., Davies, Thomas & Leudar, 1999; Romme & Escher, 2000). Romme & Escher (1996) exemplify this connection by reporting a case study of a woman who heard a male voice that said unpleasant things to her. The voice was unidentifiable other than through the characteristics of its behaviour. In this respect the relationship she had with her voice was like the relationship she had with her father, a man who was critical of her performance and wanted to control her life. It spoke to her when she was tense (but not when

she was relaxed, e.g., working at school), made her angry and bore none of the characteristics of a positive relationship like the one she shared with her mother. A further example of the connectedness of 'real' relationships and those experienced with voices is provided by Birchwood (1999); he draws attention to the many psychotic individuals who have been sexually abused, where the abuser is personified in the voice.

### Interpersonal theory and voice hearing

Given the proposed link between interpersonal relating and voice hearing, it is perhaps surprising that the application of interpersonal theory to this domain of psychopathology has received so little attention. Indeed, until recently, only the study of Benjamin (1989) has sought to understand relationships with voices from this theoretical perspective. The reasons for this remain unclear, though the complexity and inaccessibility of the Structural Analysis of Social Behaviour (Benjamin, 1974) may be a contributory factor.

The Structural Analysis of Social Behaviour (SASB) is a model of social interactions and associated internalisations that can be used clinically to explore interactive patterns in schizophrenia. It hypothesises that social interactions can be measured around two axes reflecting the degree of affiliation (love-hate) and interdependence (dominate-emancipate). Benjamin (1989) used the Itrex Questionnaire (a self-report questionnaire based upon the SASB model) to investigate the relationships that existed between 30 psychiatric inpatients and their auditory hallucinations.

The broader context to the study of Benjamin (1989) was the debate about the role of social factors in the aetiology of schizophrenia. Suggesting that psychotic processes start as an adaptive response to a 'noxious social invasion', she was eager to explore any congruence between social patterns within the family and subsequent social patterns in the hallucination. Her more limited aim within the study was to explore the extent to which the relationship with the hallucination reflected the relationship with the illness: if the relationship with the

voice continued to be an adaptive one, possibly relative to the continued poverty of social relationships, the more intractable and chronic the illness may become.

Benjamin (1989) reported that all voice hearers, regardless of diagnosis, had integrated, personally coherent relationships with their voices. In many instances these relationships also exhibited complementarity, i.e., certain interpersonal positions maximise others. For example, if the voice was experienced as nurturing and protective the hearer would trust it; if the voice was experienced as controlling the hearer would defer and submit to it. This complimentary relationship however was less likely to occur in people with a diagnosis of schizophrenia ( $N = 11$ ). For example, three of the eleven subjects within this diagnostic group indicated that their voice reacted in the 'loving' direction despite the fact that each attacked his or her voice and felt that the voice was attacking too. This finding appears consistent with the observations of Chadwick & Birchwood (1994; Birchwood & Chadwick, 1997) regarding the incongruence that can exist between responses to and beliefs about the voice.

Benjamin (1989) concludes by stating that 'the richness of social interaction can be found in the internal world represented by the voice' (p.308). Furthermore, she draws on qualitative data to illustrate the extent to which this internal world may be connected with 'real' happenings, for example, the relationship with the voice can mirror interactive patterns within the family and serve to define self in ways that are more satisfactory than reality. The implications for treatment of Benjamin's (1989) findings rest with the hypothesis that she was attempting to examine; if the relationship with the voice is serving an adaptive function, relative to an impoverished social environment, 'then one might conclude that treatment must confront, on an individual basis, the function of the hallucination and provide more satisfactory social alternatives' (p.308).

Birchwood & Chadwick (1997) drew on the conclusions of Benjamin (1989) when they proposed possibilities for further research into the interpersonal nature of individual's relationships with their voices. Cognitive schemata, they suggest, embody the individual's past experience of relationships, particularly early relationships with powerful care-givers. As these schemata influence the development of any new relationship, they are likely to influence the way in

which the voice is related to. Construction of the meaning of voices may consequently be linked to cognitive schemata concerning wider interpersonal relationships. This point will be considered in greater detail in the context of the study of Birchwood, Meaden, Trower, Gilbert & Plaistow (2000).

The work of Benjamin (1989) provided some new and interesting insights into the nature of the voice hearing experience and represented a first attempt to quantitatively explore the extent to which voices are related to as an 'interpersonal other'. The fact that no published studies of a similar nature were conducted over the succeeding eleven years is difficult to understand. As previously mentioned, the complexity of the SASB may have been a contributing factor. A further criticism of the SASB relates to its construction around a horizontal axis ranging from love to hate, the latter being a relatively less desirable quality, meaning that the axis is not value free and is possibly subject to a social desirability bias. Finally, Benjamin's reliance upon qualitative data to explore her hypotheses raises the question as to whether the qualitative and quantitative data in this study were consistent.

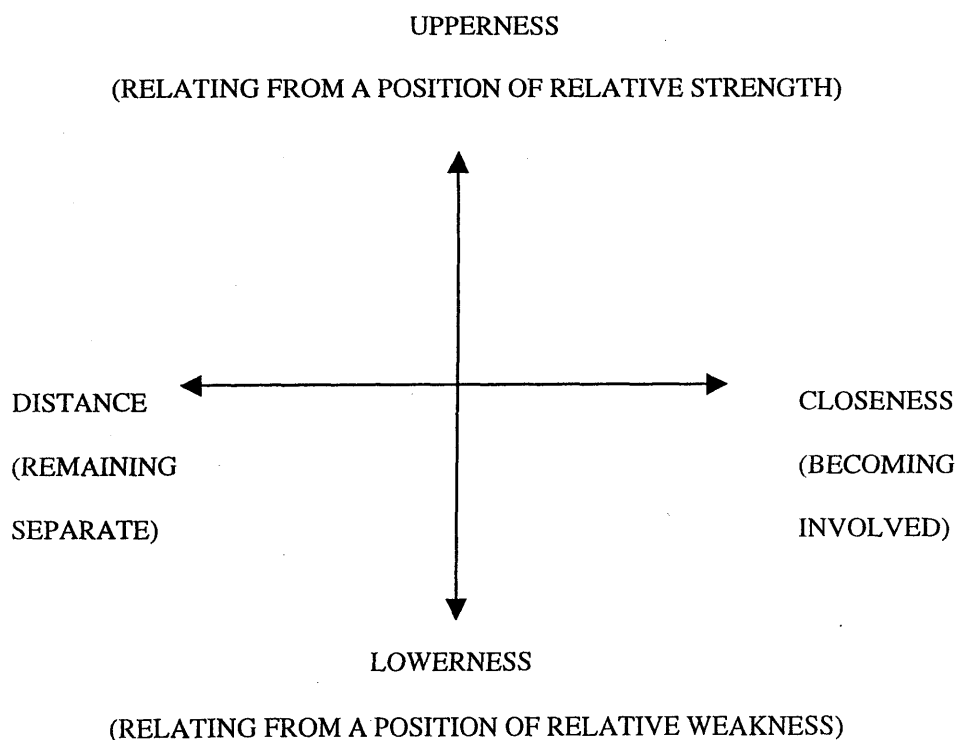
These observations suggest that SASB model may not be the most appropriate framework within which to understand any mirroring that may exist between social relationships and relationships with the voice/s. A theory of relating that is capable of addressing these issues has been proposed by Birtchnell (1993, 1999). It is to a consideration of Birtchnell's theory that this introduction will now turn.

### Relating theory

Birtchnell (1993, 1999) is critical of existing interpersonal history (e.g., Leary 1957, cited in Birtchnell, 1990) because of the pejorative way in which it suggests that certain ways of relating (dominating and loving) are more favourable than others (submitting and hating). From an evolutionary perspective, he suggests, all forms of relating have survived because they carry advantages for the organism. He consequently describes relating along the orthogonal axes of power and proximity, represented at each pole by 'upper – lower' and 'distant –

close', respectively (see figure 1); the axes carrying 'the important implication that no position within the system is more or less desirable than any other' (Birtchnell, 1990, p. 1190). These four positions represent innate predispositions towards simple, easily identifiable goals: closeness (attaining close proximity and involvement); distance (escaping from the threat of others and ensuring survival of self); upperness (gaining advantage over others); and lowerness (seeking the protection and help of others). They were subsequently blended to create the intermediate positions of the interpersonal octagon. The occupancy of each position is referred to as a 'state of relatedness' which is advantageous in relation to another or others and will facilitate the meeting of the individual's needs. Birtchnell (1994) describes states of relatedness as the relating equivalent of food. However, unlike its physiological equivalents, a state of relatedness is attained in relation to another person (or sometimes an animal, plant or thing).

**Figure 1.** The Two Main Axes of Relating (Birtchnell, 1993, p.40)



In order to meet his/her needs through the attainment of different states of relatedness, an individual has to acquire confidence (resulting from good



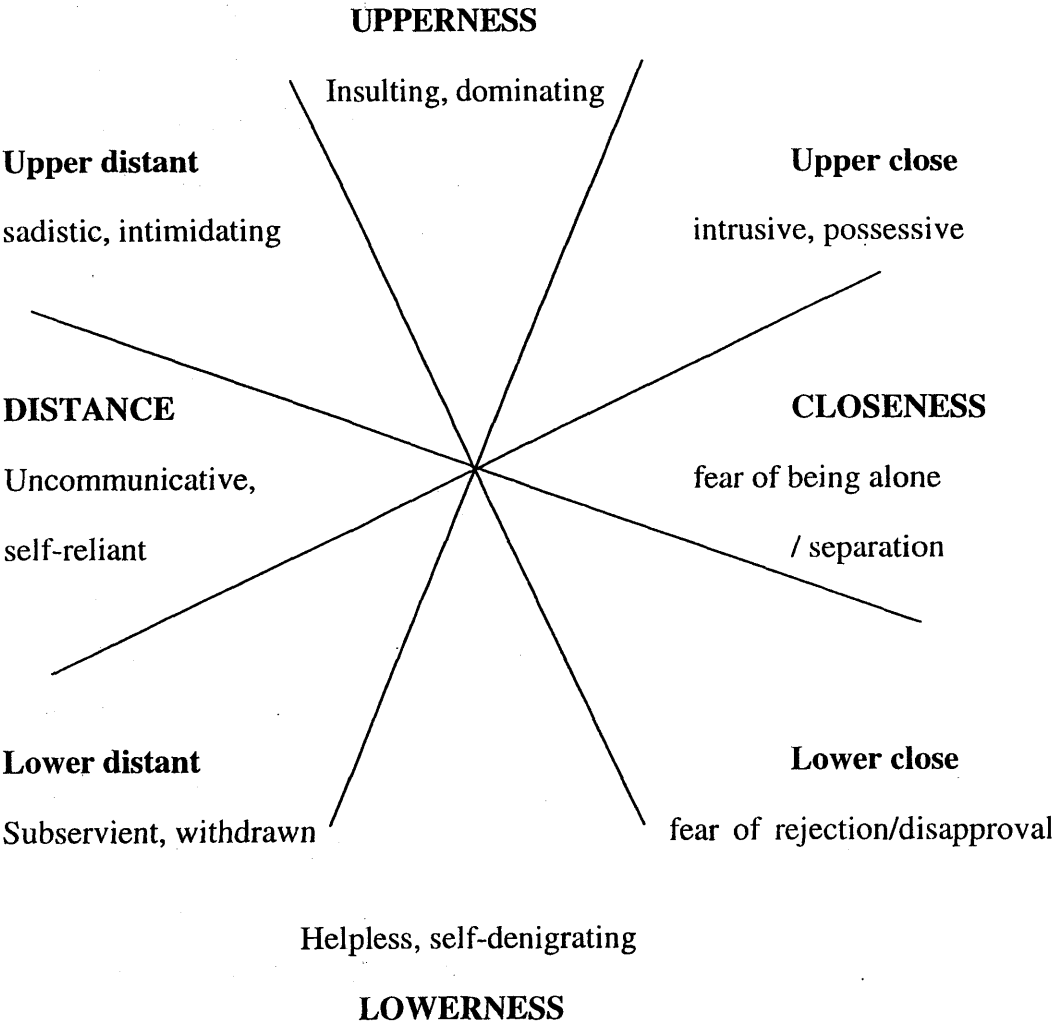
experiences) and competence (development of aptitudes and skills) within each position. Pivotal in this respect are relationships with parents and early influential figures. If the child is denied the opportunity to accumulate satisfactory stores of experiences within each state of relatedness their capacity to attain them will be limited.

On the horizontal dimension.....the person unsure of his/her ability to be close adopts a negatively distant (withdrawing) form of behaviour. The person unsure of his/her ability to be distant adopts a negatively close (clinging) form of behaviour. On the vertical dimension.....the person unsure of his/her upperness adopts a negatively upper (dominating, suppressing and boasting) form of behaviour. The person unsure of his/her lowerness adopts a negatively lower (approval seeking, self-blaming and care-eliciting) form of behaviour (Birtchnell, 1990, p. 1193).

Individuals who accumulate a store of satisfactory experiences in each quadrant are said to be 'versatile'; they are able to competently move between positions in response to the relating of others and relate positively. 'Rigidity', on the other hand, would represent the limited variation in the relating style of individuals who cannot, or are disinclined, to relate in certain ways. They relate negatively from their favoured (relatively comfortable) position/s regardless of the needs/relating of others. Imposed states of relatedness are also conceptualised in terms of negative relating. Considered to be qualitatively different from positive relating (rather than its extreme), negative relating is represented within a separate octagon (see figure 2).

Birtchnell (1994) further clarifies the motivation of an individual to seek or hold on to states of relatedness in ways that are unacceptable: the *egocentric* relater needs a particular state of relatedness so badly that s/he is prepared to get it and hold onto it irrespective of what this does to the other person; an *avoidant* relater will cling excessively to a position through fear of the opposite position; and an *insecure* relater will cling to a position through fear of losing it due to incompetence, the behaviour of others, or a combination of the two. Optimum

**Figure 2.** The Interpersonal Octagon: Negative relating. (based on Birtchnell, 1997, p.272)



interrelating would usually occur when both parties seek complimentary states of relatedness. On the proximity axis this would involve the seeking of the same state (i.e. both seeking either closeness or distance). On the power axis different positions would be sought (i.e. one must need upperness when the other needs lowerness). From the perspective of negative relating, interrelating is seriously disrupted:

The egocentric relater does not interrelate, s/he simply relates and expects the other to accommodate to him/her (which the other may or may not choose to do). An insecure relater will check repeatedly that the other is maintaining his/her part of the bargain and make repeated attempts to reinforce his/her position (e.g., an insecurely close person will keep checking that the other wants to remain close and an insecurely upper person will keep boasting).....An avoidant relater will try to organise the relationship so that s/he never needs to assume the feared position (e.g., a closeness avoiding person will keep erecting barriers to close involvement) (Birtchnell, 1994, p.525).

Birtchnell (1990) suggests that it is negative relating that is synonymous with psychopathology, psychiatric disorders being most commonly associated with negative forms of lowerness and distance. More specifically, schizophrenia (the psychiatric disorder with the highest prevalence of voice hearing) is seen as a condition of negative distance, whereby the individual withdraws from others and 'turns in on the self' through fear of encroachment/invasion, possibly as a consequence of few satisfactory experiences of closeness.

With respect to voices, Birtchnell's axes of proximity and power can be used to elucidate the relationship between the voice hearer and a voice that is often imposed (upon the hearer) and reported as intrusively intimate and malevolent. On the axis of power a striking parallel can also be drawn with the work of Birchwood and Chadwick (1997; Chadwick & Birchwood, 1994). Birtchnell (1993) makes a distinction between *benevolent* and *malevolent* forms of upperness. The upper person, he suggests, is in a position to control the behaviour of others and has the potential to do them good or harm: 'S/he may derive the

satisfaction of upperness from cruelty and remorselessly torturing, tyrannising, intimidating, taunting, insulting, exploiting or manipulating others. This is called '*malevolent* upperness' (Birtchnell, 1999, p.107: italics in the original). Being the recipient of such abuse can be extremely hurtful and damaging. The person in the position of 'imposed lowerness' is insulted and humiliated to an extent that threatens to destroy the spirit and break the will so that s/he no longer represents a threat. The response of the recipient will be to retaliate or escape, but sometimes neither can be achieved and s/he simply has to take it, possibly amidst an appreciation of the reasons why the other is needing to relate in this way. Concerning the axis of proximity, Birtchnell (1993) describes the way in which disrespectfully imposed closeness occurs when, against the wishes of the recipient, a person invades the other's physical or psychic interior. Such behaviours are usually accompanied by an element of force, thereby implicating one of the intermediate (or interactional) positions of the octagon, namely, upper closeness.

It is clear that negative forms of relating on the axes of power and proximity can be applied to individuals' relationships with their voices: the hearer may be forced to relate to the voice from the reciprocal position of (negative) lowerness in response to the voice's malevolent upperness, and withdraw (into a position of negative distance) from the threat of the voice's disrespectful closeness (intimacy). But what of voices perceived to be benevolent? Are they related to negatively, albeit to a less distressing degree, following the development of some form of 'modus vivendi'? Or are benevolent voices related to in a qualitatively different way (i.e., positively)? Furthermore, is it the general relating style that the hearer brings to the relationship that determines the perception of the voice (as malevolent or benevolent) or perceptions of the voice (as aligned with significant others or congruence with core beliefs) that determine the positions from which it is related to?

Birtchnell's (1993, 1999) theory of relating represents an accessible framework for exploring the relationships that can develop between individuals and the voices (conceptualised as interpersonal others) that they hear. Two

studies have applied the theory to the experience of voice hearing (Newman Taylor, 1998; Vaughan, 2000). They will now be examined in detail.

### Application of Birtchnell's relating theory to voice hearing

#### The role of agency

The first study to use Birtchnell's relating theory to explore relationships with voices was conducted by Newman Taylor (1998). Concerned primarily with the role of agency (individuals' beliefs about their ability to control their responses) in voice hearing, she suggested that perceived control was only meaningful in relation to another. Birtchnell's (1993) interpersonal theory of relating was consequently posited as a useful way of exploring the unexpected finding of Birchwood & Chadwick (1997) that the power attributed to the voice was not associated with the individual's ability to bring on and stop their voices.

Newman Taylor's (1998) sample comprised 31 people who had heard voices for at least six months, irrespective of diagnosis. Beliefs about malevolence of predominant voices, tendency to resist or engage the voice and participant's emotional reactions were established using the BAVQ (Chadwick & Birchwood, 1995). Using a semi-structured interview, participants were asked to talk about the most recent and most memorable occasion when they had heard the predominant voice. Agency of the self and of the voice was ascertained using case grammar analysis. 'Relative agency' was calculated through a comparison of the number of times the self or the voice was cast as agent. Consistent with previous studies, beliefs about the voice's malevolence were associated with behavioural resistance and negative affect, and beliefs about the voice's benevolence were associated with behavioural engagement and positive affect. The tendency to resist the voice increased as the voice hearer's sense of agency (control) increased relative to that attributed to the voice. Regression analysis indicated that the most significant predictor of resistance was the interaction of malevolence with 'relative agency'.

Birchwood & Chadwick's (1997) anomalous finding with respect to voice power and the ability of the hearer to control the activity of the voice was

explained in the context of relative control that was specific to the relationship between the hearer and the voice, i.e., the hearer may have some control over the voice and be able to switch it on and off, but the voice may have relatively more control/power which is exerted in other ways.

To Newman Taylor (1998) control is related to the axis of power (upperness and lowerness relative to the voice). But, as occupation of either position can be experienced as positive or negative, it is the interaction with the degree of malevolence attributed to the voice that will predict individual's responses to their voices, i.e., a position of lowerness relative to a voice perceived as malevolent will reduce resistance and maximise vulnerability to distress. In order to explicate this model of individuals' responses to voices the axis of proximity was 'transposed' and replaced with a unipolar construct of malevolence, where 'voice malevolence' is equated with negative relating and located at one end of a continuum of 'acceptability', with 'no malevolence' at the other. This action seems to have two consequences. Firstly, it falls into the pejorative trap of the love-hate axis, whereby malevolence and benevolence are equated with negative and positive relating, respectively (John Birtchnell, personal communication). Secondly, there is too great an emphasis on the dichotomous categories of Chadwick and Birchwood (1995) which, as previously mentioned 'do not appear to encapsulate the whole range of beliefs about voices identified by those who hear voices' (Close & Garety, 1998, p.185). There is sufficient scope within the above discussion to suggest that this dichotomy may lack a precision, particularly in predicting responses to voices that may not be controlled for by recourse to the power axis alone.

Vaughan (2000) confesses to be rather puzzled by the findings of Newman Taylor (1998).

Behavioural resistance has been shown to be associated with negative affect (Birchwood & Chadwick, 1997). It seems reasonable to expect that an increase in relative agency for the voice hearer would result in a reduction in negative affect, yet this [Newman Taylor's] model suggests that resistance (and therefore by association, negative affect) increases as agency increases (p.21).

She suggests that these issues could have been clarified by the gathering of an independent measure of distress experienced in relation to the voice. Such a measure was pivotal to her study as she sought to use Birtchnell's model to explore the influence of relating style upon the emotional response to the experience of voice hearing.

### The mediation of distress

Drawing on existing research, Vaughan (2000) proposed that the relationships that people have with their voices may resemble the sorts of relationships that exist with other people in general. As such, distress resulting from the relationships that exist between the voices and the voice hearers may arise from the types of interpersonal problems that are usually associated with dysfunctional styles of relating (i.e., over-involvement, over-submissiveness, dominance and extreme distance).

In order to assess the ways in which the voice and the voice hearer related to each other, it was necessary to adapt existing measures that had been developed to assess the specific relationships that existed between an individual and a specified other. The Couples Relating to Each Other Questionnaire (CREOQ) was developed by Birtchnell & Spicer (1994) for that purpose and consists of two questionnaires, one measuring the way in which an individual relates to a specified other and the second measuring their perception of the way in which the other relates to them. These measures were adapted by Vaughan (2000) to create two 40 item questionnaires: the YTV (You To Voice), a measure of the way in which a voice hearer relates to his/her predominant voice; and the VTY (Voice To You), a measure of the voice hearer's perception of the way that their predominant voice relates to them (see methods section for details of the validity and reliability of these measures). The YTV and VTY were completed by 29 participants who, irrespective of diagnosis, had heard voices for at least 6 months. In addition, data was generated regarding voice topography (PSYRATS; Haddock, McCarron, Tarrier & Faragher, 1999), beliefs about voices (BAVQ; Chadwick & Birchwood, 1995), depression (BDI II; Beck, Steer & Brown, 1996) and distress (measured on five point likert scale which was found to correlate highly with the measure of distress on the PSYRATS).

Vaughan (2000) hypothesised that the emotional reaction to the predominant voice would be associated with 'negative' styles of relating between the voice hearer and the voice. Specifically, she predicted that there would be positive correlations between: (1) distress and voice upperness ('dominance'); (2) distress and voice closeness ('intrusiveness'); (3) distress and hearer lowerness ('submissiveness'); and (4) distress and hearer distance (attempting to keep a safe distance). Preliminary analysis revealed support for each of the hypotheses, although the correlation between hearer lowerness and distress was in the opposite direction to that predicted, i.e., a negative correlation (this finding will be interpreted at a later point). However, as findings corroborated those of previous studies with respect to beliefs about voices and associations were found between many of the other measured variables, partial correlations controlling for malevolence, benevolence and depression were conducted to tease out the influence of possible confounding factors on the research variables. Following this analysis, the degree to which a voice was perceived as relating to the voice hearer from a dominant (voice upperness) position remained significantly correlated with distress and the degree to which the voice hearers perceived themselves to be relating to the voice from a distant position remained significantly correlated with distress.

The findings of Vaughan (2000) were interpreted as evidence of independent associations between distress and hearer distance, and distress and voice dominance. As the degree to which the voice hearer distanced themselves from the voices was also strongly correlated with the perception of the voice relating from a dominating position, it was proposed that:

In terms of relating to another human, one can see how obtaining physical and emotional distance from an intrusive, bullying individual may decrease distress. But voices are internal others which are perceived to be omnipresent and, as part of the self, often as omniscient. It is suggested that attempts at distancing oneself from the uninvited (and unwelcome) presence of a negatively dominant voice are often unsuccessful and ineffective at reducing the distress provoked by the voice hearing experience (Vaughan, 2000, p.97).



Vaughan (2000) is suggesting that the voice, as an intrapsychic phenomenon, cannot be escaped from and will continue to be experienced as distressing in spite of the best efforts of the hearer. If sufficient distance cannot be created between the hearer and the voice, this may lead to submission on the part of the hearer. Birtchnell & Spicer (1994) found that women who were in good marriages rated themselves as relating from a more 'submissive' position than those whose marriages were in trouble, and Vaughan (2000) suggested that a similar dynamic could account for her anomalous finding that increasing hearer lowerness was associated with lessening distress. If applied to the experience of voice hearing, the voice hearer could be considered to have 'given in' and submitted to a dominant voice (which may previously have been resisted), with a consequent reduction in resistance and associated negative affect. Vaughan (2000) cited the negative correlation between hearer distance and hearer submissiveness as evidence in support of this possibility. An attempt was made to integrate this finding with those of other studies by suggesting that a perceived inability to change the nature of the relationship with the voice (resulting from submission) may activate beliefs about the self as useless, which in turn may lead to helplessness in managing the situation and the development of depression. Distress resulting from the experience of hearing the voice will consequently be maintained.

Vaughan (2000) is critical of her study with respect to both the novelty of her measures and a focus exclusively upon 'predominant' voices. The former issue concerns the need for further investigation into the psychometric properties of the questionnaires that were developed to assess the relationship between voice hearers and their voices. The latter issue concerns a criticism which can be levelled at many of the studies cited in this introduction. They focus exclusively on voices which are, by their nature, perceived as more powerful and influential than other voices, yet:

Many people heard more than one voice.....It may be that individuals have very similar relationships with all their voices, that is, relate in consistent ways to each voice regardless of the style of relating of

the voice, or it may be that the sort of relationship an individual has with each of their voices is unique (Vaughan, 2000, p.90).

Each of these issues will be addressed within the current study.

When considering the clinical implications of her findings, Vaughan (2000) reflects upon the extent to which the individual variations in relationships with voices may arise through associations with past relationships with 'real' others. She highlights the need for psychological assessment to consider the identity of the voice (possibly inferred from its character and interpersonal behaviour) and to explore the historical nature and subsequent impact of the relationship between that 'real' person and the voice hearer. The possible utility of such an identification is illustrated by a case study of a man who, following the disclosure of a traumatic rape by a group of boys in his childhood, was able to identify his voices as those of his perpetrators. The voices related from a dominant, controlling and bullying position and he responded by withdrawing and distancing himself from the voices. This relationship mirrored the way he had related to others since the event. Therapy consequently focussed upon developing a new narrative surrounding the event and the development of methods to manage the bullying voices and assert himself more generally within his social world.

The studies of Newman Taylor (1998) and Vaughan (2000) have generated empirical evidence in support of evolving hypotheses about the possible influence of interpersonal factors upon the experience of voice hearing. A new theory of relating has facilitated the conceptualisation of the relationship between the voice hearer and the voice as a relationship with an interpersonal 'other'. This endeavour has created the possibility of exploring any similarities that may exist between relationships with voices and relationships in the social world. This could be done with respect to the mirroring of a relationship with a personified voice and the relationship with that person in the 'real' world (as suggested by Vaughan, 2000) or the mirroring of a relationship with a voice (not necessarily personified) and social relationships more generally. The latter possibility was explored by Birchwood et al (2000) using a different theory of relating, 'social ranking theory' (Gilbert & Allan, 1998). It is to a consideration of this study that this introduction will now turn.

### Extending the concept of relationship

The study of Birchwood et al (2000) moved beyond the specific relationship between the voice hearer and the voice to consider the extent of its congruence with the voice hearer's wider social relationships. From the perspective of social ranking theory, they considered malevolent voices to be an example of stimuli perceived as threatening and powerful that would activate defensive and self protective responses and be involuntarily subordinated to. Citing the resistance to malevolent voices as an example of such subordination, they hypothesised that voice hearers would perceive the voice as higher in social rank and power, relative to themselves. Furthermore, building upon the suggestion of Birchwood & Chadwick (1997) concerning the extent to which the appraisal of the voice will be influenced by 'core interpersonal schema which.....embody the individual's past experience of interpersonal relationships' (p.1352), it was hypothesised that the difference in social rank and power between self and voice would be strongly correlated with the perceived difference in social rank and power between self and others in the social world.

Birchwood et al (2000) gathered data from 59 participants who had heard voices for at least two years and had a clinical presentation consistent with schizophrenia or schizo affective disorder. Each participant completed measures of voice topography (Hustig & Hafner, 1990) and beliefs about voices (BAVQ: Chadwick & Birchwood, 1995). Differentials of power and rank were assessed with respect to the voice hearer and voice, and the voice hearer and others in their social world. Social rank was measured using the Social Comparison Scale (SCS; Allan & Gilbert, 1995) and an adapted version of this was used to measure the hearer's rank in relation to the dominant voice (the Voice Rank scale). Power was assessed by newly developed questionnaires that drew on constructs associated with ranking theory (strength, confidence, respect, ability to inflict harm, superiority and knowledge) to measure the power differential between the voice and the voice hearer (Voice Power Differential scale; VPD) and the voice hearer and others in their social world (Social Power Differential scale: SPD). Each of

the questionnaires developed for this study demonstrated good internal and test-retest reliabilities.

Consistent with their hypotheses, Birchwood et al (2000) found there to be high differentials of power and rank between the voice hearer and the voice, which favoured the voice. Regarding power, the differential was similar whether the voice was perceived as malevolent or benevolent. This finding supports previous research which has found voices to be perceived as powerful regardless of the perceived intention (Chadwick & Birchwood, 1994; Birchwood & Chadwick, 1997). In order to determine the relative contribution of voice and social variables, stepwise discriminant function was performed on groups whose membership was defined by the extent to which differentials of power and rank were “higher” or “lower”. Two variables were identified as predictive, social (power and rank) variables and beliefs about the voice’s malevolence.

The findings of Birchwood et al (2000) suggest that the power and rank differentials between the voice hearer and the voice are mirrored by differences in power and rank that exist between the voice hearer and others within his/her social world. The direction of these relationships is seen as critical and has implications for the therapeutic approach that is chosen. The authors suggest a model whereby interpersonal schema affect both beliefs/affect about voices and depression. This offers a novel therapeutic approach:

as it would predict that attempts to improve individual social status or position, perhaps through group identification, assertiveness training and problem solving therapy....., would impact directly on individuals’ attempts to deal with their voices via a consequent change in the power balance between self and voice (Birchwood, et al, 2000, p.342).

The rationale for the direction of the relationship with depression is clear as social variables were selected in preference to depression scores within the multivariate analysis. The relationship between beliefs about voices and interpersonal schema is less clear. Birchwood et al (2000) state that an intervention study will be required to disentangle this relationship. Vaughan (2000), in her critique of Birchwood et al’s study, proposes that it may be the combined effect of social

variables along with a malevolent voice that contributes to the perception of the self as subordinated to the voice, rather than social variables in isolation.

An additional finding of note within the study of Birchwood et al (2000) concerned the topographical features of voice loudness and frequency. When the frequency and the loudness of the voice was rated as higher, the voice was appraised as more powerful. If the perception of frequency and volume are in part the direct result of the appraisal of power, it is suggested that therapeutic interventions that do not target the power of the voice may be ineffective. The newly developed omnipotence scale of the BAVQ-R facilitates an exploration of these relationships. Such an exploration will be undertaken within this study.

The innovative study of Birchwood et al (2000) has provided further evidence of the utility of considering the experience of voice hearing within an interpersonal framework. Furthermore, initial support has been generated for the hypothesis that the way individuals relate to their voices may mirror past and present ways of relating to others. The direction of this relationship remains uncertain, and the correlational nature of the current study will limit clarification of this issue. However, what seems to be important, is the broadening of the concept of relationship beyond the dimension of power to which Birchwood et al (2000) restrict their study. If relationships with voices do mirror relationships in the social world, they are likely to be imbued with all the complexity and idiosyncrasy of normal relationships. This will include issues of proximity and intimacy, dimensions of relating which Birtchnell (1993) argues are particularly pertinent to the relating of people with a diagnosis of schizophrenia.

Prior to a consideration of the hypotheses that will be investigated within this study, it is necessary to further explicate the rationale that underpins the potential clinical utility of a relational approach to voices.

### Clinical relevance

The need to develop a greater understanding of the relational aspects of the voice hearing experience is driven by a number of factors: (1) the limited ability

of therapeutic interventions to extinguish the voices; (2) the extent to which voices can be experienced by some individuals as positive; and (3) the way in which the relationship with voices has been demonstrated to change over time. In combination, these factors suggest that it may be necessary and possible to develop a relationship with voices that results in a lessening of the distress that is often associated with the experience. Each of these factors will now be considered in detail and located within a theoretical framework.

The evolution of psychological treatments for auditory hallucinations was necessitated by the poor response to neuroleptic medication of some patients who experience positive symptoms of psychosis (including auditory hallucinations). Some patients derive no benefit from medication (Davis & Casper, 1977), while others may even get worse (Bowers and Swigar, 1988). The exact number of patients who fail to benefit from medication is hard to estimate, but Leudar & Thomas (2000) suggest that:

the fact that the industry has invested so much time and money in the development of the new 'atypical' anti-psychotic drugs, such as clozapine and risperidone, indicates that there is a market, and that the market is constituted by people who have not responded to anti-psychotic drugs (p.119).

The psychological treatment of auditory hallucinations has encompassed a range of interventions. Slade & Bentall (1988) list nine types of treatments reported to be successful in bringing about a reduction in hallucinatory activity, which are grouped in terms of three processes: anxiety reduction, focusing and distraction or counter-stimulation. Subsequent studies have successfully deployed a range of techniques, broadly defined as cognitive behavioural, in the treatment of auditory hallucinations: Bentall, Haddock & Slade (1994) report a clear reduction in the duration of the voices, and a reduction in the distress associated with them in three of six participants who received a focusing treatment; Chadwick and Birchwood (1994) utilised a cognitive therapy approach to dispute and test beliefs about voices and reported a reduction in the frequency and duration of voice activity in each of four participants; and, within a group format, Chadwick, Sambrooke, Rasch & Davies (2000) employed cognitive therapy to

successfully challenge beliefs about the omnipotence and control of the voices of 21 participants, but reported no reduction in the frequency of the voices.

Only one study has moved away from case reports and case series to more rigorously examine the efficacy of psychological treatments for voices within a randomised controlled trial. This involved the comparison of focussing and distraction treatments within a small randomised controlled trial that was followed-up after two years (Haddock et al, 1998). An advantage was reported for focusing over distraction in terms of its influence on self esteem and on the amount to which patients believed their voices to be their own thoughts. However, despite participants in both treatment conditions experiencing reductions in the amount of time they spent hallucinating, these effects were not significant.

Whilst each of the above studies was, to some extent, successful, none resulted in the participant being free from voices. This is not to say that psychological treatment cannot result in the extinction of voices; Morley (1987) presents a single case study of an individual whose voices ceased following treatment with headphones and earplugs. What is more commonly reported is a reduction in the duration and frequency of the voices. Bouchard, Vallieres, Roy & Maziade (1996), in a review of five methodologically robust studies, concluded that, contrary to work with delusions where elimination might be an acceptable goal for many cases, 'For hallucinations.....we found more support for an increase of control over hallucinations and associated distress than the achievement of a hallucinationfree state' (p.272). It is therefore likely that the individual whose voices do not respond to neuroleptic medication will continue to hear voices following successful psychological treatment, and these voices will continue to be experienced in relation to the self.

If an individual continues to hear voices, even after successful psychological intervention, albeit voices that may be less frequent and distressing, and more under control, what does the literature say about the potential for the relationships with these voices to change? Nayani & David (1996) compared the voices of people to whom the experience was relatively recent (less than one year) to those of people with a longer history of voice hearing. They discovered that hallucination complexity and delusional construction developed with time, and

that the voices of the recent onset group caused greater distress and were less likely to encourage a dialogue. Also, two thirds of the sample declared that some of their voices were repeated across illness episodes. These findings were interpreted as evidence that voices could evolve, from those that are relatively few, highly distressing and primitive, through a process of 'intimacy' and the 'accretion' of new voices (or the addition of more complex utterances from the same voice), to those that can be more complex and dialogical, and experienced as less distressing. The implication, state Nayani & David (1996), 'would be that patients be taught to create pleasant hallucinations in order to offset the effects of the unpleasant ones' (p.187).

The theme of developing more positive relationships with voices is articulated within the pioneering work of Romme & Escher (1993, 2000). Drawing upon their work within the voice hearer self-help movement in Holland, they reflect on the extent to which voice hearers often reported the existence of a positive voice (amidst the negative voices) or a positive and helpful dimension to the experience. The strategy of selecting the positive voices and listening, talking to and trying to understand only them, is illustrated by the following quote from a voice hearer:

In this period of ignoring the voices, to my surprise there were two voices that wanted to help me. My first reaction was to send them away, because they were getting on my nerves, but they insisted that I needed them, and to be honest, I realised this was true. The voices taught me how to watch, feel and hear (Romme & Escher, 1993, p. 21).

Romme & Escher (1993) acknowledge the difficulty of trying to persuade someone experiencing malicious and ridiculing voices that there is a positive dimension to their experience. Here they cite the usefulness of contact with other voice hearers within self help groups, which can lead to a 'surprising discovery that positive voices do exist, and.....that these may arise, or be detected as a result of the proper acceptance of the hearer's own negative side' (p.54).

A more detailed account of the development of a positive voice is described by Davis, Thomas & Leudar (1999) who describe the case of 'Peggy' to



illustrate their 'dialogical' approach to the engagement of voices. Peggy heard two voices: *the guardian angel*, which commanded her to do 'wicked' things and which reminded her of her father because, like him, it had an opinion about everything; and *my little devil*, which was regarded as helpful because it told her to take the Host (from the Tabernacle), which she believed would help her to resist the suggestions of the guardian angel. Peggy compulsively followed the instructions of the guardian angel (e.g., to smother an old lady who was very ill) and was reliant upon the interventions of other people to prevent her acting as the voices instructed. The purpose of the dialogical approach was to help Peggy to introduce moral considerations to mediate the voices commands and her actions, and to encourage her to take greater responsibility.

The dialogical intervention required Peggy to record sequences of statements made by her voices, and for her to insert her considered reply to the voices, which she could rehearse, like the learning of a new role. After one session, Peggy heard a new voice telling her that the guardian angel would not destroy her. Named *the holy angel*, this new voice sounded like Peggy's voice, but shared pragmatic qualities in common with her friends as, like them, it reassured and supported her. The holy angel also mediated between Peggy and the other voices, saying that what they told her to do was wrong.

#### Possible implications for clinical practice

Each of the processes of change outlined within this section require an ability on the part of the hearer to enter into a dialogue and become more intimate with their voices: in other words, to enter further into relationship. This being the case, it is important to have an awareness of (1) the styles of voice relating that may typically be associated with a lessening of distress and (2) the extent to which the general style of (social) relating is able to facilitate or inhibit the modification of the relationship with the voice. At the level of the individual, such an awareness, in combination with the availability of a method of assessing idiosyncratic relationships with voices, will indicate the ways in which therapeutic intervention may need to modify the relating of the voice hearer (either generally or specifically in relation to the voice) in pursuit of relationships with voices which are experienced as less distressing.

## Aims and objectives of this study

### Aims

Over the past decade there has been a growing consensus about the extent to which the experience of voice hearing can be construed as a relationship that exists between the voice hearer and the voice. Recent attempts to explore these relationships have focussed upon the power differential between the voice hearer and the voice or paid insufficient attention to the broader context of social relationships. The aim of this study is to compliment the existing literature by deploying a new theory of relating (Birtchnell, 1993,1999) to explore proximity within the relationship and the extent to which it is mirrored in the social relationships of the voice hearer. The specific objectives of the study are as follows:

### Objectives

- Explore the general relating style of a sample (voice hearers) whose style of relating has not previously been assessed using the Birtchnell's (1999) measure of general relating style (PROQ2);
- Assess further the psychometric properties of a measure of relating to the voice (YTV);
- Replicate findings of previous research with regard to beliefs about voices, voice content, voice topography and the mediation of distress by relating style;
- Explore the extent to which the different voices of multiple voice hearers are related to in ways that are similar;
- Examine a set of theoretically-driven hypotheses:

### Hypotheses

It is hypothesised that negative styles of relating between the voice hearer and the voice will be associated with the general relating style of the voice hearer. The hypothesised correlations are as follows:

- 1) There is evidence to suggest that voice hearers perceive their voices as more powerful than themselves (Birchwood & Chadwick, 1997; Chadwick & Birchwood, 1994; Close & Garety, 1998) and that this power differential is mirrored within social relationships (Birchwood et al, 2000). Therefore, it is hypothesised that a positive correlation will be found between negative upperness scores in relation to the voice (YTV) and negative upperness scores within the general relating style (PROQ2).
- 2) Complimentary to hypothesis 1, evidence suggests that voice hearers relate to their voices from subordinate positions and that such subordination is mirrored within social relationships (Birchwood et al, 2000). It is consequently hypothesised that a positive correlation will be found between negative lowerness scores in relation to the voice (YTV) and negative lowerness scores within the general relating style (PROQ2).
- 3) There is evidence to suggest that some voice hearers attempt to resist, avoid and remain distant from voices which are perceived to be malevolent in their intention (Birchwood & Chadwick, 1997; Chadwick & Birchwood, 1994; Vaughan, 2000). Regarding social relating, it has been suggested that the relationships with the voice may be influenced by 'interpersonal/social schemata' (Birchwood & Chadwick, 1997; Birchwood et al 2000) and reflect social patterns with the family (Benjamin, 1989). Also, the general relating style of people with a diagnosis of schizophrenia (who often experience voices) is considered by Birtchnell (1993, 1999) to be extremely distant. Therefore, it is hypothesised that a positive correlation will be found between negative distance scores in relation to the voice (YTV) and negative distance scores within the general relating style (PROQ2).

- 4) There is evidence to suggest that some voice hearers attempt to engage and develop intimacy with voices which are perceived to be benevolent in their intention (Birchwood & Chadwick, 1997; Chadwick & Birchwood, 1994; Vaughan, 2000). Regarding social relating, it has been suggested that the relationships with the voice may be influenced by 'interpersonal/social schemata' (Birchwood & Chadwick, 1997; Birchwood et al, 2000) and reflect social patterns with the family (Benjamin, 1989). Therefore, it is hypothesised that a positive correlation will be found between negative closeness scores in relation to the voice (YTV) and negative closeness scores within the general relating style (PROQ2).

## METHOD

### Design

A correlational design was adopted to investigate the association between the way in which voice hearers related to (1) the voices that they heard and (2) people within their social environments. The selection of this design was prompted by the research hypotheses that made predictions about the relationships that existed between the selected variables.

### Participants

Participants were recruited through mental health professionals working in a variety of settings, both in-patient and out-patient. Referrals were sought for anyone, 16 years or over, who had heard voices for a period of at least six months, irrespective of diagnosis.

In total, 43 people were approached regarding participation within the study: eleven people did not wish to participate; of the 32 people who agreed to participate, four were unable to complete the interview due to difficulties in understanding the requirements of the procedure; and one client asked to terminate the procedure without giving a reason.

Twenty seven people completed the interview procedure. Demographic data is given in the results section.

### Measures

A demographic information sheet (see appendix 1) was used to gather information that facilitated an assessment of the extent to which the sample in the current study was representative of samples of voice hearers investigated within other

studies. Six measures were used to assess aspects of the voice/s, style of relating and mood.

#### Semi-structured interview

A short clinical interview (see appendix 2) was based upon a series of questions taken from the Cognitive Assessment of Voices (Chadwick & Birchwood, 1994), a semi-structured schedule that has been reported by Close & Garety (1998) to be reliable with respect to both inter-rater (Kappa > .6 on 10 of 11 categories) and test-retest (Kappa > .7 on 8 of 11 categories) reliability. The initial question enquired of the number of voices heard. Subsequent questions referred only to the 'predominant' voice and focussed upon its gender, identity and recent examples of what it had said. Voice content was further explored with reference to person (e.g., second, third) and themes (e.g., commands, commentary and criticism). A final question concerned the last time that the voice had been heard.

#### You To Voice (YTV)

Until recently no measure was available for assessing relationships with voices. Vaughan (2000) modified Birtchnell & Spicer's (1994) Couples Relating to Each Other Questionnaire (CREOQ) for this purpose to produce the YTV. This has 40 items measuring four subscales (Upperness, Lowerness, Closeness & Distance). Three of the subscales were shown by Vaughan (2000) to have adequate levels of reliability (Cronbach's alpha of 0.86, 0.75 & 0.86) and one (upperness) where the Cronbach's alpha was less acceptable at 0.65. The YTV as devised by Vaughan (2000) and used in this study is given in appendix 3. Each item was scored on a four point scale (0 to 3). In the event of missing data, the scores for each of the subscales were prorated.

Additional information regarding the adaptation of YTV from the CREOQ is given in Appendix 4.

### Person's Relating to Others Questionnaire – Revised Version (PROQ2)

The Persons Relating to Others Questionnaire – Revised Version (PROQ2; see appendix 5) is a 96 item questionnaire which assesses an individual's 'general relating tendencies' (Birtchnell, 1999). It has eight scales which correspond to the eight octants of Birtchnell's (1993, 1999) negative octagon, each comprising 12 questions scored on a four point scale (0 to 3). The higher the total score, the greater the tendency to relate negatively from that position.

The psychometric properties of the PROQ2 have been investigated by Birtchnell & Evans (in preparation). It was found to have internal consistency ranging from 'reasonable' (.77) to 'excellent' (.86). Test-retest reliabilities (after 3 weeks) were described as 'encouraging' (.90 for the total score and a range of .65 to .90 for the octant scales). With regard to validity, Birtchnell & Evans (in preparation) reported the results of a principle component analysis (PCA) on a clinical (N = 432) and non-clinical sample (N = 276). In the PCA of items, the four neutral positions were strongly supported as separate components.

Rather than adapt the PROQ2 to a 40 item short-form equivalent to the YTV, i.e., comprising the neutral scales only, a decision to use the PROQ2 in its entirety and preserve its psychometric properties was made in consultation with John Birtchnell.

### Psychotic Symptoms Rating Scale (PSYRATS: Auditory hallucinations scale)

The PSYRATS is a scale designed to measure the severity of different dimensions of auditory hallucinations and delusions (Haddock, McCarron, Tarrier & Faragher, 1999; Appendix 6). For the purpose of this study, only the scale measuring auditory hallucinations (AHRS) was administered.

The AHRS is an 11 item scale. Items include frequency, duration, loudness, beliefs, amount of negative content, amount of distress and controllability. Each item is measured by the rater on a five point scale ranging from 0 – 4.

The psychometric properties of the PSYRATS were investigated by Haddock et al (1999). The AHRS was found to have good inter-rater reliability, with nine of the 11 items producing estimates of reliability in excess of 0.90. Inter-item correlations were low, suggesting that each of the items on the scale are relatively independent of each other and form a unique profile of symptom characteristics.

#### Beck Depression Inventory - II (BDI-II)

The BDI-II is a 21 item questionnaire designed to assess the severity of depression in adolescents and adults (Beck, Steer & Brown, 1996). The items correspond to different symptoms of depression, e.g., pessimism, self-dislike, loss of interest, changes in sleep pattern and concentration difficulty. Each item comprises four statements representing different levels of the symptom scored on a four point scale (0 to 3). Respondents are required to indicate the statement which best describes the way that they have been feeling over the past two weeks. Responses are summed (to a maximum of 63) and interpreted by means of the cut-off scores specified by Beck et al (1996).

The psychometric properties of the BDI-II were assessed by Beck et al (1996). Reliability was found to be high with respect to internal consistency (coefficient alpha of .92 for outpatients and .93 for students) and test-retest stability (correlation of .93 between inventories administered one week apart to a subsample of 26 outpatients). Evidence of the convergent validity of the BDI-II were provided by significant correlations with other measures of depression.

The BDI-II was used in preference to other measures of depression (e.g., The Hospital Anxiety and Depression Scale, Zigmond & Snaith, 1983; the Hamilton Rating Scale for Depression, Hamilton, 1960; and the depression scale of the General Health Questionnaire, Goldberg, 1972) because it is quick and easy to administer and score, it is able to differentiate between psychiatric and non-psychiatric populations and it can assess current levels of depression whilst providing a continuum of clinical severity.



The BDI II was included in this study in order to explore the extent to which any mirroring of relationships could be accounted for by mood linked appraisals.

#### The revised Beliefs About Voices Questionnaire (BAVQ-R)

The original Beliefs About Voices Questionnaire (BAVQ) was derived from Chadwick & Birchwood's (1994) cognitive model of voices. It measured beliefs about the voice's intent (malevolent or benevolent) and the behavioural responses (resistance or engagement) of the hearer. Chadwick & Birchwood (1995) found the BAVQ to be reliable (mean alpha coefficient 0.85; mean test-retest correlation 0.90) and valid (principal-components analysis revealed single and strong factors for each subscale).

Chadwick, Lees & Birchwood (2000) identified two weaknesses of the BAVQ: the dichotomous response scale ('yes' or 'no') which led to small individual differences and changes over time being missed; and the limited number of questions related to the important construct of voice power (omnipotence). Each of these issues was addressed by the development of the BAVQ-R (Chadwick, Lees & Birchwood, 2000; see appendix 7), a 35 item questionnaire that generates five sub-scales: three concerning beliefs about the voices (malevolence, benevolence & omnipotence) and two concerning emotional and behavioural reactions (resistance and engagement). Each item is rated on a four point scale (0 to 3). Individuals who hear more than one voice are asked to complete the questionnaire for their 'dominant voice'.

The psychometric properties of the BAVQ-R were investigated by Chadwick, Lees & Birchwood, (2000). Reliability was found to be 'uniformly high' for each of the subscales. Correlations between scales were suggestive of construct validity. With respect to the original four scales of the BAVQ, results corroborated findings from previous studies (Chadwick & Birchwood, 1994, 1995; Birchwood & Chadwick, 1997): strong relationships were found between malevolence and resistance, and between benevolence and engagement; and all other correlations between these subscales were strongly negative. The new scale of omnipotence correlated strongly and positively with malevolence and

resistance, and strongly and negatively with engagement. No significant relationship was found between the scales of omnipotence and benevolence.

### Procedure and ethical considerations

The research procedure was approved by Southern Derbyshire Local Research Ethics Committee (see appendix 8) and the ethics committee of Queen's Medical Centre, Nottingham (see appendix 9). Potential participants were approached by a keyworker/care co-ordinator (who had been briefed about the purpose of the study) and asked if they would be interested in taking part in a study that was exploring the experience of voice hearing. If potential participants expressed an interest, a meeting was arranged with the investigator. The meetings were arranged in a way that maximised the participant's feelings of safety and comfort, e.g., participant's chose the venue and were invited to bring the referrer, a friend or a family member. In order to ensure that consent was informed, potential participants were given an information sheet (appendix 10) at least 24 hours before the initial meeting with the investigator. At that meeting, questions were encouraged, the limits of confidentiality were stated and the implications of taking part in the study were explored. Where necessary, the entire first meeting was given over to the consideration of these issues.

If agreement was given, consent was verified by completion of a consent form. Measures were administered in the following order: demographic information sheet; semi-structured interview; PSYRATS; YTV; BAVQ-R; PROQ2; BDI-II. Typically, the first appointment was terminated following completion of the PSYRATS. The remaining questionnaires were completed during a second appointment. Throughout the interview process the investigator was vigilant for signs of participant distress. Indeed, the second appointment began with a consideration of the ways in which the voices may have reacted as a result of being spoken about. For those participants accessed in Derby, a requirement of ethical approval was that a follow-up appointment be offered during which any distress associated with the process of participation be explored. This option was taken up by two participants.

Following completion of the interview process participants were offered the opportunity to receive information about the findings of the study upon its completion. Confirmation of information pertaining to diagnostic category was subsequently obtained from the participant's medical notes.

## RESULTS

### Data analysis

Analysis of data was carried out using the Statistical Package for Social Sciences (SPSS Inc., Chicago, Illinois, USA) for Windows (Version 8).

The data were normally distributed and met the assumptions for the use of parametric statistical tests on the BDI-II and each of the scales of the YTV, PROQ2 and BAVQ-R. Analysis of this data was consequently conducted using parametric statistics (Pearson's  $r$ ). Only three variables on the PSYRATS were normally distributed (voice loudness, voice frequency and intensity of distress). Two further variables (duration of voices and amount of control) were normalised using logarithmic and square root transformation, respectively. However, the variables of amount and degree of negative content remained abnormally distributed following transformation and did not meet the assumptions required for the use of parametric tests. Data from these two variables was analysed using non-parametric statistics (Spearman's  $\rho$ ). For the purposes of clarity, when these two variables are included in analysis (Table 5), Spearman's  $\rho$  will be reported for all findings to aid the comparison of results.

Due to the number of multiple comparison's within the analysis, the author acknowledges the increased risk of a type 1 error (false positive) occurring. Levels of significance were not corrected using the Bonferroni test as this would have increased the likelihood of falsely accepting the null hypothesis (type 2 error).

The data to be reported are complex and will be considered under several headings. Firstly, a description of the sample and the nature of their voices will be given. Secondly, where the current study overlaps with previous work in this area, the findings will be analysed to check that the findings are similar. Thirdly, relating will be considered from a general (social) perspective. Fourthly, relating to the voice and its correlates will be explored. Fifthly, the main hypotheses of

this study will be considered. Finally, some further supplementary analyses will be offered.

### A description of the research sample

Twenty seven people took part in the study. Of these, sixteen participants were men (59.3%) and 11 were women (40.7%). Participants' ages ranged from 21 to 60 years, with a mean age of 39.52 (SD = 10.73). All but three of the participants had previously been admitted to psychiatric hospital. The number of admissions ranged from 0 to 10 ( $M = 2.67$ ;  $SD = 2.17$ ). All participants were being prescribed antipsychotic medication at the time of the interviews. Duration of voice hearing ranged from 1 to 31 years, with a mean of 12.59 (SD = 8.30). Regarding diagnosis, 26 participants were diagnosed with schizophrenia and one with manic-depressive psychosis.

The current sample is similar to the samples of other studies with respect to the ratio of male to female participants (reported as 2:1 by Birchwood & Chadwick, 1997, Birchwood et al, 2000 & Close & Garety, 1998), prescribing of antipsychotic medication (Birchwood, 2000; Close & Garety, 1998), age (reported as a mean of 39 years (SD = 11.8) by Birchwood & Chadwick, 1997) and duration of voice hearing experience (reported as a mean of 13 (SD = 10) by Vaughan, 2000).

### Depression

Depression scores on the BDI II ranged from 0 to 49. The mean score was 22.48 (SD = 15.26). Categorical data indicated that most of the participants (70%) scored above the "cut score" and would consequently be considered to be depressed. Of these, the majority were either "moderately" (30%) or "severely" (26%) depressed. Eight participants (30%) scored below the cut score threshold and would be considered to be "minimally" depressed.

### A description of the voices

Data concerns the predominant voice.

#### Alignments

Table 1 indicates the identity that participants attributed to their voices: eight participants were able to identify their voice as aligned to someone in the real world; six participants identified their voices as supernatural, e.g., God or the Devil; two identified the voice as an aspect of the self; and three voices had an identity (i.e., were named) that was not aligned to someone in the real world. Eight participants heard 'incognito' voices which were identifiable only with respect to gender and content of speech.

**Table 1.** Identity attributed to the predominant voice

|                            | Frequency | Percent      |
|----------------------------|-----------|--------------|
| Incognito                  | 8         | 29.6         |
| Identified but not aligned | 3         | 11.1         |
| Supernatural               | 6         | 22.2         |
| Family member              | 6         | 22.2         |
| Self                       | 2         | 7.4          |
| Famous person              | 1         | 3.7          |
| Acquaintance               | 1         | 3.7          |
| <b>Total</b>               | <b>27</b> | <b>100.0</b> |

#### Description of the voice dimensions (PSYRATS)

Full details of the descriptive data on the PSYRATS are provided in Appendix 11.

Voices were identified as male (N = 13) or female (N = 10), though some remained genderless (N = 4). There was no relationship between the gender of the hearer and the gender of the voice. The majority of participants heard their voices at least once a day (74%) and approximately half of the sample heard their voices at least once an hour or continuously. The voices were described by most participants as speaking at the same volume as their own voice or louder. Few

participants described the volume of their voices as quieter than their own voice (17%).

With regard to voice content, the findings were consistent with reports of other clinical samples. Most participants reported that the majority of voice talk was negative in content (74%), and for a quarter of the sample this negativity extended to the content of all voice talk. The degree of negative content ranged from no unpleasant content through to personal threats to harm self or family, but the ratings were skewed towards the severe end, with 70% of participants reporting personal threats.

Consistent with other clinical samples, most participants rated their voices as distressing to at least a “moderate” degree. For six of these participants distress was “extreme”. Only three participants rated their voices as “not distressing at all”. Finally, ratings of controllability of voices revealed that half of the participants perceived themselves to have no control over their voices. Of those participants reporting some control, only one perceived themselves to have total control.

#### Description of beliefs about voices and behavioural responses – (BAVQ-R)

The original version of the BAVQ-R (the Beliefs About Voices Questionnaire: BAVQ) had cut-offs which allowed beliefs about voices to be assigned ‘caseness’ with respect to malevolence and benevolence. Cut-offs were not derived for the BAVQ-R as its first author was unsure about their additional value (Paul Chadwick, personal communication). The description of data from the BAVQ-R was consequently restricted to ordinal data.

Ratings for malevolence had a mean of 11.0 (SD = 6.03). The distribution of scores was negatively skewed. Three participants rated their predominant voice as not malevolent (a score of 0). The mean benevolence score was 5.0 (SD = 6.57). The distribution of scores was significantly positively skewed. A majority of participants rated their voice as having no benevolence (a score of 0).

Of the three scales measuring beliefs about voices, omnipotence had the highest mean ( $M = 11.78$ ) and the lowest standard deviation ( $SD = 3.41$ ). Most participants rated the omnipotence of their voices above the mid-point of the scale. The minimum score on the scale was 6, indicating that no participants rated their voices as having no omnipotence.

Concerning the resistance and engagement scales of the BAVQ-R, the following trends emerged. Most participants did not engage with their voices ( $M = 6.85$ ;  $SD = 8.33$ ). Whilst scores fell across the full range of the measure, the distribution was significantly positively skewed. The majority of participants resisted their voices ( $M = 18.59$ ;  $SD = 7.53$ ). Scores ranged from the lower to upper ends of the scale, but were again significantly skewed, this time in a negative direction.

#### Analysis of associations between beliefs about voices, emotional and behavioural responses and voice topography: a replication of previous research

In order to check that the sample was comparable with other research samples, a number of relationships between beliefs about voices, behavioural and affective responses to voices and voice topography were investigated.

#### Omnipotence

The newly developed scale of omnipotence was comparable only with the sample upon which it was validated (Chadwick et al, 2000). As found in that sample, beliefs about the voice's omnipotence were: (1) positively correlated with beliefs about the voice's malevolence ( $r = .44$ ,  $p < .05$ , 2-tailed) and coping by resistance ( $r = .41$ ,  $p < .05$ , 2-tailed); and (2) not significantly correlated with beliefs about the voice's benevolence ( $r = .37$ , n.s.). Unlike the study of Chadwick et al, (2000), the negative correlation between omnipotence and coping by engagement was found to be non-significant ( $r = -.28$ , n.s.).

A significant positive relationship was found between omnipotence and the PSYRATS measures of amount of negative content (Spearman's  $\rho = .39$ ,



p.<.05, 2-tailed) and degree of negative content (Spearman's rho = .46, p.<.05, 2-tailed).

#### Beliefs about voices and behavioural responses

As previously found, beliefs about the voice's malevolence were positively correlated with coping by resistance ( $r = .73$ ,  $p < .01$ , 2-tailed). There was a positive correlation between beliefs about the voice's benevolence and coping by engagement ( $r = .96$ ,  $p < .01$ , 2-tailed).

#### Beliefs about voices and emotional responses

Correlations between beliefs about voices and emotional responses were expected and found. Malevolence was significantly positively correlated with depression ( $r = .48$ ,  $p < .05$ , 2-tailed) and the PSYRATS measure of intensity of distress ( $r = .57$ ,  $p < .01$ , 2-tailed). Conversely, benevolence was found to be significantly negatively correlated with distress ( $r = -.63$ ,  $p < .01$ , 2-tailed) and depression ( $r = -.53$ ,  $p < .01$ , 2-tailed).

#### Beliefs about voices and voice content

As expected, there was a significant positive correlation between malevolence and the PSYRATS measures of amount of negative content (Spearman's rho = .56,  $p < .01$ , 2-tailed) and degree of negative content (Spearman's rho = .68,  $p < .01$ , 2-tailed). Significant negative correlations were found between benevolence and both amount of negative content (Spearman's rho = -.67,  $p < .01$ , 2-tailed) and degree of negative contact (Spearman's rho = -.52,  $p < .01$ , 2-tailed).

#### Beliefs about voices and voice topography

Contrary to the findings of recent studies the correlation between malevolence and the PSYRATS measures of voice loudness ( $r = .34$ , n.s.) and frequency of hearing ( $r = -.07$ , n.s.) the voice were not significant.

### General relating style

The PROQ2 is divided into eight scales which together form the interpersonal octagon: four scales measure negative relating within the “neutral” positions of Upperness, Lowerness, Closeness and Distance; and four scales measure the “intermediate” positions of Upper closeness, Upper distance, Lower closeness and Lower distance. Scores for each scale are out of a possible thirty, a higher score indicating a greater degree of negative relating. The total score on the PROQ2 was calculated by addition of the eight scales, to a maximum score of 240. The mean total score was 136.5 (SD = 29.66). The majority of scores fell within the upper half of the range, creating a negatively skewed distribution. This indicated that the general relating style of the participants tended to negative.

### Descriptions of the neutral scales

For the purposes of hypothesis testing within this study, only the four scales relating to the neutral positions were utilised. Data describing these scales is reported below. The extent of relationships with other variables is also considered.

Each participant rated their general relating tendencies on the scales of Upperness, Lowerness, Closeness and Distance. The mean Upperness score fell in the midpoint of the range ( $M = 14.9$ ;  $SD = 7.52$ ). Scores were given across the full range of the scale. The mean Lowerness score was 16.3 ( $SD = 6.22$ ). Scores were given across the range of possible scores, though the distribution was negatively skewed. This suggests that participants tended to relate to people in their social environment from a submissive position. The mean score for Closeness was 17.6 ( $SD = 7.49$ ). Again, the full range of possible scores was utilised, but the distribution was negatively skewed. This indicated that participants tended to fear separation from the people to whom they related closely. Finally, the mean score for distance was 17.5 ( $SD = 6.45$ ). Scores fell across the possible range and were normally distributed.

### Correlations with depression

As relating style has previously been demonstrated to be more negative in depressed individuals, the relationship between depression and general relating style was investigated. As predicted, the total score on the PROQ2 was significantly positively correlated with the score on the BDI II ( $r = .43$ ,  $p < .05$ , 2-tailed). Also consistent with previous findings was the significant positive correlation between closeness and depression scores ( $r = .41$ ,  $p < .05$ , 2-tailed). The positive correlation between lowerness and depression scores was found to be approaching significance ( $r = .37$ , n.s.). Contrary to previous findings, no significant relationship was found between depression scores and distance ( $r = .31$ , n.s.).

### Relating to voices

The psychometric properties of the YTV will be examined with reference to internal consistency and the independence of the scales. This will be followed by the reporting of descriptive statistics. Associations between these scores and other measures will then be described.

### Internal consistency of the YTV

The internal consistency of the YTV was analysed using Cronbach's alpha. The alpha scores for each of the scales of the YTV are summarised in table 2.

**Table 2.** Cronbach's alphas for each of the scales of the YTV

| Scale     | Cronbach's alpha |
|-----------|------------------|
| Upperness | 0.44             |
| Lowerness | 0.85             |
| Closeness | 0.74             |
| Distance  | 0.79             |

Analysis of the YTV's internal consistency produced acceptable Cronbach's alphas of greater than 0.74 for the scales of Closeness, Distance and Lowerness. One item on the closeness scale was difficult for many participants to answer. Omitting this item (item 24) increased the alpha to 0.82. However, as the alpha for the complete scale was acceptable, further analysis was conducted upon the Closeness scale in its entirety. The Cronbach's alpha for the Upperness scale was unacceptably low. The removal of any single item did not significantly enhance its internal consistency. See discussion section for a critique of the YTV's reliability.

#### Relationships between scales on the YTV

Associations between the scales on the YTV were examined for the current sample.

**Table 3.** Correlations between the scales of the YTV

|           | Upperness | Lowerness | Closeness | Distance |
|-----------|-----------|-----------|-----------|----------|
| Upperness | 1.00      |           |           |          |
| Lowerness | -.23      | 1.00      |           |          |
| Closeness | .12       | .73**     | 1.00      |          |
| Distance  | .27       | -.35      | -.14      | 1.00     |

\*\*  $p < .01$ .

As can be seen from Table 3, correlations are small and insignificant between most of the scales of the YTV. This suggests that there is a degree of independence between the scales. However, this is not the case for the scales of closeness and lowerness. A significant positive correlation between these two scales suggests that they may be measuring a single underlying factor. This issue will be expanded upon in the discussion.

#### Descriptive features of the YTV

The mean uppersness score fell in the midpoint of the range ( $M = 14.0$ ;  $SD = 4.93$ ). Scores were normally distributed and the extreme ends of the scale were not utilised. The mean lowerness score was 10.3 ( $SD = 8.38$ ). The distribution of scores was positively skewed and the extreme upper end of the scale was not

utilised. The mean score for closeness was 10.6 (SD = 7.03). The majority of the scores fell within the lower half of the scale creating a positively skewed distribution. Finally, the mean score for distance was 17.0 (SD = 7.76). Scores fell across the range of possible scores, but the distribution was negatively skewed. This suggested that the predominant voice was treated with suspicion and attempts were made to keep it at a safe distance.

The total score on the YTV was calculated by addition of the four scales. The mean total score was 51.8 (SD = 15.5) and the distribution was normal.

### Construct validity

In order to explore construct validity, relationships were explored between relating to the voice (YTV) and (1) the dimensions of the voice hearing experience (as measured by the PSYRATS), (2) beliefs about the voice and behavioural responses to the voice (BAVQ) and (3) emotional responses to the voice (as measured by the PSYRATS and the BDI II). Correlations were expected between relating and each of the above measures.

### Relationships with the BAVQ-R

Bivariate correlations were examined between the scales of the YTV and the scales of the BAVQ-R. The findings are summarised in table 4.

**Table 4.** Bivariate correlations between scales of the YTV and scales of the BAVQ-R

|           | Malevolence | Benevolence | Resistance | Engagement | Omnipotence |
|-----------|-------------|-------------|------------|------------|-------------|
| Upperness | .17         | -.11        | .20        | -.15       | -.15        |
| Lowerness | -.41*       | .72**       | -.54**     | .72**      | -.04        |
| Closeness | -.28        | .65**       | -.36       | .57**      | -.21        |
| Distance  | .35         | -.51**      | .55**      | -.49*      | .25         |

\*  $p < .05$ ; \*\*  $p < .01$ .

### Malevolence.

It was expected that malevolence would be positively correlated with distance. This relationship was found to be positive, but only to a degree that was approaching significant ( $r = .35$ , n.s.). The only scale that was found to significantly correlate with malevolence was lowerness, which did so in a negative direction ( $r = -.41$ ,  $p < .05$ , 2-tailed).

### Benevolence.

It was expected that benevolence would be positively correlated with lowerness and closeness, and negatively correlated with distance. Significant positive correlations were found with lowerness ( $r = .72$ ,  $p < .01$ , 2-tailed) and closeness ( $r = .65$ ,  $p < .01$ , 2-tailed). A significant negative correlation was found between benevolence and distance ( $r = -.51$ ,  $p < .01$ , 2-tailed).

### Resistance.

Significant positive correlations were expected between resistance and relating from the positions of upperness and distance. The positive correlation between resistance and upperness did not reach significance ( $r = .20$ , n.s.). A significant positive relationship was found between resistance and distance ( $r = .55$ ,  $p < .01$ , 2-tailed). An additional significant correlation, in a negative direction, was found between resistance and lowerness ( $r = -.54$ ,  $p < .01$ , 2-tailed).

### Engagement.

It was expected that engagement would be significantly positively correlated with lowerness and closeness, and significantly negatively correlated with upperness and distance. The negative correlation between engagement and upperness did not reach significance ( $r = -.15$ , n.s.). A significant negative correlation was found between engagement and distance ( $r = .49$ ,  $p < .05$ , 2-tailed). Significant positive

correlations were found between engagement and lowerness ( $r = .72$ ,  $p < .01$ , 2-tailed) and engagement and closeness ( $r = .57$ ,  $p < .01$ , 2-tailed).

### Omnipotence.

No significant associations were found between relating to the voice and beliefs about the voice's omnipotence.

### Relationships with the PSYRATS

Bivariate correlations were examined between the scales of the YTV and the dimensions of the voice hearing experience as measured by the PSYRATS. The findings are summarised in table 5. Due to the failure of the dimensions of amount of negative content and degree of negative content to meet the assumptions required for parametric tests, non-parametric tests were used. For consistency, Spearman's rho correlations are reported throughout the table.

**Table 5.** Bivariate correlations (Spearman's rho) between scales of the YTV and dimensions of the PSYRATS

|           | Frequency | Duration | Loudness | Amount negative content | Degree negative content | Control |
|-----------|-----------|----------|----------|-------------------------|-------------------------|---------|
| Upperness | -.43*     | -.13     | .11      | .04                     | -.02                    | -.20    |
| Lowerness | .21       | .35      | -.35     | -.44*                   | -.22                    | -.32    |
| Closeness | -.06      | .33      | -.28     | -.35                    | -.15                    | -.31    |
| Distance  | -.24      | -.25     | .00      | .53**                   | .19                     | .01     |

\*  $p < .05$ ; \*\*  $p < .01$ .

### Distance.

Significant positive correlations were expected between distance and the dimensions of loudness, amount of negative content and degree of negative content. A significant positive relationship was found between distance and amount of negative content ( $\rho = .53$ ,  $p < .01$ , 2-tailed). The correlations with loudness ( $\rho = .00$ , n.s.) and degree of negative content ( $\rho = .19$ , n.s.) were found to be non-significant.

### Upperness, Lowerness and Closeness.

No predictions were made with respect to the correlations between the dimensions of the PSYRATS and the scales of upperness, lowerness and closeness. Significant negative correlations were found between upperness and frequency of voices (Spearman's  $\rho = -.43$ ,  $p < .05$ , 2-tailed) and lowerness and amount of negative content (Spearman's  $\rho = -.44$ ,  $p < .05$ , 2-tailed). All other correlations between these scales of the YTV and the dimensions of the PSYRATS were non-significant.

### Relationships with emotional responses

Contrary to expectation, the associations between distance and depression ( $r = .22$ , n.s.) and distance and intensity of distress ( $r = .09$ , n.s.) were found to be non-significant. In order to clarify this finding the distress and depression ratings were compared for participants whose distance scores were in different tertile ranges (see table 6).

**Table 6.** Intensity of distress and depression ratings for participants whose distance scores were in different tertile ranges

| Tertile range | N  | Mean depression rating (SD) | Mean distress rating (SD) |
|---------------|----|-----------------------------|---------------------------|
| First         | 9  | 17.76 (18.81)               | 2.44 (1.51)               |
| Second        | 8  | 28.00 (12.82)               | 3.00 (0.93)               |
| Third         | 10 | 22.40 (13.41)               | 2.30 (1.06)               |

Comparison of mean ratings indicated that participants who related most distantly to the voice reported themselves to be less distressed and depressed than some of the participants who related to the voice less distantly. One way analysis of variance (ANOVA) found the differences between tertile ranges to be non-significant for the ratings of depression ( $F(2,24) = 0.97$ , n.s.) and distress ( $F(2,24) = 0.82$ , n.s.).

Relating to the voice from a position of closeness was significantly negatively correlated with the intensity of distress ( $r = -.43$ ,  $p < .05$ , 2-tailed). All other



correlations between voice relating and distress were non-significant. Depression was not significantly correlated with any form of relating to the voice.

As the intensity of distress associated with the voice had previously been shown to be significantly correlated with beliefs about the voice's malevolence and benevolence, partial correlations were conducted in order to control for the possible confounding effect of these variables upon the association between closeness to the voice and intensity of distress. No significant partial correlations were found between closeness and amount of distress when malevolence ( $r = -.34$ , n.s.) and benevolence ( $r = -.04$ , n.s.) were controlled for.

### Hypothesis testing

The main hypotheses of this study were explored using bivariate correlations. See table 7 for a summary of the results.

**Table 7.** Bivariate correlations between scales on the YTV and scales on the PROQ2

|               | PROQ2<br>upperness | PROQ2<br>lowerness | PROQ2<br>closeness | PROQ2<br>distance |
|---------------|--------------------|--------------------|--------------------|-------------------|
| YTV upperness | .56**              | -.30               | .23                | .22               |
| YTV lowerness | -.37               | .36                | .13                | -.33              |
| YTV closeness | -.20               | .29                | .40*               | -.14              |
| YTV distance  | .23                | .11                | .25                | .25               |

\*  $p < .05$ ; \*\*  $p < .01$ .

In view of the number of correlations reported in Table 7 there is an increased likelihood of a type 1 error occurring. Findings should therefore be viewed with caution.

### Hypothesis 1

It was predicted that upperness in relation to the voice would be positively correlated with upperness within the general relating style. A significant positive

correlation was found between upperness on the YTV and upperness on the PROQ2 ( $r = .56$ ,  $p < .01$ , 2-tailed). This hypothesis was therefore supported.

### Hypothesis 2

It was predicted that lowerness in relation to the voice would be positively correlated with lowerness within the general relating style. The positive correlation was found to be approaching significance ( $r = .36$ , n.s.). There was consequently tentative support for this hypothesis.

### Hypothesis 3

It was predicted that closeness in relation to the voice would be positively correlated with closeness within the general relating style. A significant positive correlation was found between closeness on the YTV and closeness on the PROQ2 ( $r = .40$ ,  $p < .05$ , 2-tailed). This hypothesis was therefore supported.

### Hypothesis 4

It was predicted that distance in relation to the voice would be positively correlated with distance within the general relating style. The correlation between distance on the YTV and distance on the PROQ2 was not significant ( $r = .25$ , n.s.). This hypothesis was therefore not supported.

### Partial correlations

The bivariate correlations provided support for two of the four hypothesis, and tentative support for one other. However, the scales of the YTV have also been shown to correlate significantly with beliefs about the voice's malevolence and benevolence and the scales of the PROQ2 have been associated with depression. In order to control for the possible confounding effects of these variables upon the association between relating to the voice and general relating style, partial correlations were performed. Firstly, depression scores were partialled out of the analysis as they have previously been shown to be correlated with aspects of

general relating. Mood linked appraisals may consequently have accounted for the association between the hypothesised variables. Secondly, beliefs about the voice's malevolence and benevolence have been shown to be correlated with aspects of the relationship with the voice. Beliefs about the voice's malevolence and benevolence may have accounted for the associations with general relating style. The partial correlations relating to the three supported hypotheses are reported below.

### Hypothesis 1

A significant partial correlation between upperness in relation to the voice and upperness within the general relating style remained when depression ( $r = .56$ ,  $p < .01$ , 2-tailed), malevolence ( $r = .55$ ,  $p < .01$ , 2-tailed) and benevolence ( $r = .55$ ,  $p < .01$ , 2-tailed) were controlled for. The partialling out of depression, malevolence and benevolence scores had no effect upon the zero-order correlation co-efficients .

### Hypothesis 2

A significant partial correlation between lowerness in relation to the voice and lowerness within the general relating style was found when depression ( $r = .43$ ,  $p < .05$ , 2-tailed), malevolence ( $r = .40$ ,  $p < .05$ , 2-tailed) and benevolence ( $r = .45$ ,  $p < .01$ , 2-tailed) were controlled for. The partialling out of depression, malevolence and benevolence scores had the effect of strengthening the association between lowerness within general relating style and lowerness in relation to the voice, to the extent that the correlations became statistically significant.

### Hypothesis 3

A significant partial correlation between closeness in relation to the voice and closeness within the general relating style remained when depression ( $r = .56$ ,  $p < .01$ , 2-tailed), malevolence ( $r = .49$ ,  $p < .05$ , 2-tailed) and benevolence ( $r = .58$ ,  $p < .01$ , 2-tailed) were controlled for. The effect of partialling out depression,

malevolence and benevolence scores was to strengthen the associations between the two forms of relating.

### Additional analysis

#### Relating to non-predominant voices

In order to compare relating to the predominant voice with relating to voices that were not attributed the role of predominance, six of the participants agreed to complete a YTV for their predominant voice and a further YTV for one of the other voices that they heard. As the data was not normally distributed, the differences between the two measures was explored using the Wilcoxon Signed Ranks Test. When compared on an item by item basis, a significant difference between the responses on each of the YTVs was found for two participants ( $Z = -3.22$ ,  $p < .01$ , 2-tailed;  $Z = -2.90$ ,  $p < .01$ , 2-tailed). The remaining four participants exhibited no significant difference in the way they responded on each of the YTVs. However, when the scores for the scales on the YTV were compared, e.g., the distance score on the YTV for the predominant voice was compared with the distance score on the YTV for the non-dominant voice, no significant differences were found in the way in which the two voices were related to.

#### The correlates of incongruence between general relating style and relating to the voice

A crude measure of the incongruence between general relating style and relating to the predominant voice was calculated to facilitate an exploration of the correlates of relating to the voice in a way that differed from general relating style. Incongruence was established by calculating the difference between the total score on the YTV from the total of the four neutral positions on the PROQ2. Scores ranged from 19 to 60 ( $M = 18.3$ ;  $SD = 13.92$ ). Bivariate correlations were conducted to explore associations between incongruence and beliefs about voices, behavioural and emotional responses and dimensions of the voice hearing experience.

Significant associations were found between incongruence and beliefs about the voice's benevolence ( $r = -.46$ ,  $p < .05$ , 2-tailed) and omnipotence ( $r = .44$ ,  $p < .05$ , 2-tailed). The behavioural response of engagement was also significantly associated with incongruence ( $r = -.48$ ,  $p < .05$ , 2-tailed).

Concerning emotional responses, incongruence was found to have a significant association with depression ( $r = .50$ ,  $p < .01$ , 2-tailed). The correlation with intensity of distress was found to be approaching significance ( $r = .36$ , n.s.). No significant correlations were found between incongruence and any of the dimensional ratings on the PSYRATS.

Together, these findings suggest that the greater the incongruence between general relating style and relating to the voice, the greater the likelihood of the voice being construed and experienced in ways that are consistent with distress.

### The influence of voice identity

Differences were explored with respect to the identity that participants attributed to their predominant voice (see table 1). Participants were allocated to one of three groups according to the extent to which their predominant voice was identifiable and that identity was aligned with someone in the real world: *personified* voices were aligned with family members, acquaintances, famous people or the self; *supernatural* voices were identified as God, the Devil or aliens; and *incognito* voices were identifiable only by their gender and content of speech.

The three identity groups were compared with respect to relating to the voice, beliefs about the voice, emotional and behavioural responses and dimensions of the voice hearing experience. The only measure for which a between groups difference was found was distance in relation to the voice (see Table 8).

**Table 8.** Distance scores on the YTV for each of the voice identity groups

|              | <i>N</i> | Minimum<br>score | Maximum<br>score | Mean score | Standard<br>deviation |
|--------------|----------|------------------|------------------|------------|-----------------------|
| Personified  | 10       | 3                | 24               | 15.50      | 6.62                  |
| Supernatural | 9        | 2                | 25               | 12.44      | 7.83                  |
| Incognito    | 8        | 19               | 28               | 23.88      | 3.64                  |

One way analysis of variance (ANOVA) found the distance relating of the groups to be significantly different ( $F(2,24) = 7.21, p < .01$ ). Post hoc comparison using Scheffe's test found that the significant differences were between personified and incognito voices (mean difference = 8.38,  $p < .05$ ) and supernatural and incognito voices (mean difference = 11.43,  $p < .01$ ). The difference between personified and supernatural voices was found to be non-significant (mean difference = 3.06, n.s.).

#### Summary of main results

##### Beliefs about the voices and dimensions of the voice hearing experience

Evidence was found to support previous findings regarding the association between beliefs about voices and responses to voices. Beliefs about the voice's malevolence were found to be associated with coping by resistance, increased distress and depression. Conversely, beliefs about the voice's benevolence were found to be associated with engagement, less distress and low levels of depression. Associations were also found between malevolence and amount and degree of negative voice content.

Contrary to recent findings, the newly developed scale of beliefs about the voice's omnipotence was not associated with voice frequency or loudness. Omnipotence was found to be associated with depression and degree, and amount of negative voice content.

### Relating to the voice

Evaluation of the psychometric properties of the measure of voice relating suggested that there is a degree of independence between some of its scales. This was not the case for lowerness and closeness which were highly correlated. Internal consistency was found to be acceptable for three of the four scales.

Data from the measure of voice relating was only partially consistent with the study within which the measure was developed. Relating to the voice from a position of distance was found to be associated with resistance and amount of negative content, but not with malevolence, distress or depression. Relating from positions of closeness and lowerness were found to be associated with benevolence and engagement . In addition, lowerness was found to be negatively associated with amount of negative content.

Analysis of the way that multiple voice hearers related to two of their voices suggested that different voices may be related to with varying degrees of similarity.

Exploration of the influence of voice identity revealed that voices without an identity were related to from positions of significantly greater distance.

### Mirroring of general relating style and relating to the voice

There was some support for three of the four main hypotheses. Associations between general relating style and relating to the voice were found for the positions of upperness, closeness and lowerness. The partialling out of scores relating to depression and beliefs about voice's malevolence and benevolence had the effect of strengthening the associations for the positions of closeness and lowerness.

Exploration of the correlates of incongruence between general relating style and relating to the voice revealed that greater incongruence was associated with a

greater likelihood of the voice being construed and experienced in ways consistent with distress.



## DISCUSSION

The aim of this study was an exploration of the extent to which relationships with voices mirror relationships within the social world. The findings will be summarised with respect to the main hypotheses. An interpretation of these findings will be facilitated by the current theoretical knowledge that was outlined in the introduction. It is suggested that there are similarities between general relating style and the way that voices are related to, but relationships with voices may differ in ways that have important implications for potential therapeutic interventions. Prior to the discussion of these clinical implications, suggestions will be made regarding the integration of the findings from the current research into the psychological understanding of the voice hearing experience. Finally, possibilities for future research are offered.

This study undertook an exploration of the relationships that individuals develop with the voices that they hear. As this aim was achieved through the use of a new measure of relating, it is to a brief consideration of the psychometric properties of the measure that this discussion will initially turn. Issues and limitations relating to design will be addressed at a later point.

### Constraints upon interpretation of findings

A new questionnaire, the You To Voice (YTV), was used to measure the ways in which participants related to their predominant voice. Adapted from Birtchnell's (1994a) Couples Relating to Each Other Questionnaire (CREOQ) by Vaughan (2000), the YTV was validated upon a small sample ( $N = 29$ ). Its psychometric properties consequently required further evaluation.

The internal consistency of the YTV was examined using Cronbach's alpha. A detailed evaluation of this analysis will be conducted at a later point within this discussion. Pertinent to constraints upon the interpretation of findings was the poor internal consistency of the upperness scale ( $\alpha = 0.44$ ). Reported to be "approaching acceptability" by Vaughan (2000), the internal consistency of the

upperness scale within the present study was found to be unacceptably low. As a consequence, the findings relating to the upperness scale must be viewed with extreme caution and will be subject to minimal interpretation.

The reasons for the inconsistency within the upperness scale were unclear and can only be speculated upon. One of the items (item 28) was reported by Vaughan (2000) to be difficult for many participants to answer. This was possibly attributable to the grammatical complexity of this item. However, its omission from the analysis of Vaughan (2000) did not change the internal reliability of the upperness scale. At a more general level, the items within the upperness scale may have represented a paradigm shift too far for many of the participants. To construe the voice hearing experience as one that involved interrelating, as opposed to being related to by the voice, was one paradigm shift. To then conceive of themselves as in any way relating from a position of upperness within this relationship may have seemed too far fetched for many participants. Rather than manifest itself in consistently low scores, the confusion engendered by this apparent paradox may have resulted in an erratic pattern of responding that led to the inconsistency that was found.

## Summary and interpretation of findings

### Generalisability of findings

In order to generalise from the findings of the current study to the broader research literature it was important to ensure comparability with other samples. Comparability with other studies was found with respect to demographics and most aspects of phenomenology. Differences concerned the identity of the voice and the degree of negative voice content. In comparison to the samples of Nayani & David (1996) and Leudar et al (1997), more participants within the current study attributed a 'supernatural' (God, Devil, aliens, etc) identity to their voice. The voice content was found to be more threatening than that reported by Leudar et al (1997) and Haddock et al (1999), with 70% of participants receiving threats to harm self or others.

It is also important to demonstrate that the voice hearing experiences of the participants within the current sample can be understood in ways that the research literature has consistently shown to be useful in conceptualising the phenomena of interest. A summary of the main findings of this study will consequently begin by considering the cognitive model and beliefs about voices.

#### Beliefs about voices, emotional and behavioural responses and voice topography

One of the aims of this study was to replicate the findings of previous research with regard to beliefs about voices, their emotional and behavioural correlates, and their association with aspects of voice topography. As the revised version of the BAVQ was used to assess beliefs about voices, some categorical comparisons were no longer available, i.e., voices can no longer be considered to be 'malevolent' or 'benevolent', they can only exhibit degrees of malevolence and benevolence. However, it was anticipated that the utilisation of all data within correlational analysis (i.e., no redundancy of data within categories that did not reach the 'threshold score'), in combination with the four point response scale, would make the findings from the current study more sensitive to individual differences in the ways in which the intentions of voices were perceived.

The findings from the BAVQ-R replicated those reported by previous research with respect to the relationships between beliefs about the voice's intention and behavioural and emotional responses. Beliefs about the voice's malevolence were associated with coping by resistance (Birchwood & Chadwick, 1997; Chadwick et al, 2000), distress (Vaughan, 2000) and depression (Birchwood & Chadwick, 1997; Soppitt & Birchwood, 1997). Conversely, beliefs about the voice's benevolence were associated with engagement with the voice, less distress and lower levels of depression. With regard to the content of voices, the findings were consistent with Close & Garety's (1998) criticism of the cognitive model: significant associations between negative content and malevolence (positive correlation) and negative content and benevolence (negative correlation) offered further support for the importance of the content of the voice in the development of beliefs about the voice's intention.

The findings relating to the new scale of omnipotence offered a first opportunity to replicate the findings of Chadwick, Lees & Birchwood (2000). Omnipotence was again found to have the highest mean score and lowest standard deviation of the three scales which measured beliefs, supporting Chadwick, Lees & Birchwood's (2000) assertion that this concept is a vital part of the analysis of the relationships that people develop with their voices. The associations between the three measures of beliefs were replicated, as was the association between malevolence and resistance. Engagement was not found to be significantly associated with benevolence, despite generating a higher value of  $r$  than that reported by Chadwick, Lees & Birchwood (2000). This finding may be attributable to the smaller sample size within the current study. Regarding emotional responses, omnipotence was again found to be significantly associated with depression. Indeed, in each of the studies omnipotence was associated more strongly with depression than either malevolence or benevolence, providing further evidence of a pivotal role for this concept in the maintenance of distress and for the legitimacy of it being targeted by therapeutic interventions (e.g., Chadwick, Sambrooke, Rasch & Davies, 2000).

The use of the BAVQ-R offered a unique opportunity to explore the relationship of the concept of omnipotence with dimensions of the voice hearing experience. Consistent with its association with 'negative' correlates of the experience (e.g., malevolence, resistance, depression), omnipotence was found to be associated with negative voice content. Contrary to the findings of Birchwood et al, (2000), omnipotence, as a measure of the voice's power, was not associated with dimensions of voice frequency and loudness. However, this finding must be interpreted with caution as Chadwick, Lees & Birchwood (2000) consider powerfulness to be only one specific aspect of the concept of omnipotence.

In summary, this study found associations between, on the one hand, negative voice content, beliefs about the voice's malevolence and omnipotence, behavioural resistance and depression, and on the other hand, less negative content, beliefs about the voices benevolence, engagement with the voices and lower levels of depression. It is worth reiterating at this point that the correlational

design of this study does not facilitate the discernment of causality. However, relationships between variables can be inferred and hypotheses concerning the direction of causality offered. It is with this in mind that content of and beliefs about voices are, consistent with the findings of previous studies, posited as influential in determining emotional and behavioural responses to the voice hearing experience. An exploration of the relative contributions of voice content and beliefs about voices was beyond the scope of this study.

Having aligned the current sample with the broader research literature, both demographically and with respect to the construal of the voice hearing experience, aspects of relating will now be examined. A consideration of these findings will begin with the general relating style before moving onto the specific style that was employed when relating to the predominant voice.

#### General relating style

Birtchnell's (1993, 1999) theory of relating has not previously been used to explore the general relating tendencies of a sample of participants who have either a diagnosis of schizophrenia and/or hear voices. An important contribution to the research literature and the evolution of the model therefore concerns the comparison of the general relating of this sample with that of non-patient and other clinical samples, and the evaluation of Birtchnell's (1993) assumptions about the relating of people who have a diagnosis of schizophrenia.

The findings reported by Birtchnell and Evans (2001) suggest that the general relating style of the current sample was more negative than a sample of patients referred to a psychotherapy department (136.5 vs 130.3), and extremely negative in comparison to a sample of non-patients (136.5 vs 95.8). Accepting that people with a diagnosis of schizophrenia would be considered to have a greater degree of pathology than people referred to a psychotherapy department, the amount of negative relating appears to increase with the degree of psychopathology. This offers some support for Birtchnell's (1993) conceptualisation of psychopathology in terms of negative relating.

Concerning the neutral positions of upperness, lowerness, closeness and distance, findings were less straightforward. Scores for the current sample were high for each of the positions suggesting that there was 'not a typical voice hearer profile' (John Birtchnell, personal communication). As the majority of the sample also had a diagnosis of schizophrenia ( $N = 26$ ), the same may be said for the profile of relating of people with schizophrenia. This does not support Birtchnell's (1993) conceptualisation of schizophrenia as a condition of extreme distance. The amount of negative distance did exceed that of both psychotherapy patients and non-patients, but so did scores for the positions of lowerness and closeness. In combination with the amount of negative upperness, which was less than psychotherapy patients and comparable with non-patients, the profile for the current sample is similar to that of the depressed sample reported by Birtchnell, Falkowski & Steffert (1992). Considering the high proportion of the current sample who reported themselves to be experiencing at least 'mild' depressive symptomatology (70%), this could have been anticipated. What this similarity may suggest is that: (1) contrary to the expectation of Birtchnell et al (1992), there may not be variations in the general relating profiles of different diagnostic groups; and/or (2) the style of relating associated with depression is dominant and able to mask any differences attributable to other factors. The latter issue could only be teased out following therapy, as Birtchnell et al (1992) demonstrated that the negative relating of patients who "fully recovered" from depression was found to be reduced with respect to lowerness, closeness and distance.

The findings concerning the general relating style of the current sample are difficult to interpret. There is some tentative evidence to suggest that the more extreme negative relating of the current sample may be attributable to a higher degree of psychopathology. However, the profile of relating is not as distant as would have been predicted, and the relative contributions to relating style of depression, schizophrenia and voice hearing could not be distinguished. The findings of Vaughan (2000) suggested that a more distinctive profile of relating would emerge when the specific relationship with the predominant voice was considered. It is to a consideration of this relationship that this discussion will now turn.

### Relating to the voice

Consistent with the findings of Vaughan (2000), participants within the current study related to their predominant voices primarily from a position of distance. Birtchnell's (1993, 1999) theory of relating would interpret this finding as indicative of a tendency of the voice hearers to be suspicious of and uncommunicative towards the voice which they were attempting to keep at a safe distance. Such an interpretation was corroborated by data from the BAVQ-R as an association was found between distant relating and coping by resistance. An indication of the possible motivation for this style of relating was provided by associations which suggested that the voice threatened the hearer and was perceived to be somewhat malevolent in its intent.

Contrary to the findings of Vaughan (2000), relating from a position of distance was not found to be associated with the emotional responses of either distress or depression. The finding regarding distress may, in part, be attributable to the use within this study of a measure of distress (PSYRATS) that differed from the five point likert scale used by Vaughan (2000). Alternatively, relating to the voice from a position of distance may be therapeutic and produce affective benefits for this sample. This possibility was explored by the comparison of distress and depression scores of participants whose distance scores were in different tertile ranges. Whilst the results were not significant, those participants who related most distantly to the voice (third tertile) were found, on average, to be less distressed and depressed than some of the participants who related to the voice less distantly (second tertile). This finding suggests that it may be possible to attain an extreme and safe distance from the voice that can bring affective benefits. A greater source of distress and hopelessness may be the persistent unsuccessful attempts to escape the voice that are reflected by distance scores within the mid-range of the scale.

At the other end of the axis of proximity, relating to the voice from a position of closeness was reported by participants to a lesser degree. As relating from this position is associated with fear of being alone and clinging to others, the lower level of closeness complimented the primacy of relating to the voice from

distance. Consistent with a need to be close to the voice were associations with the BAVQ-R which suggested that the voice was engaged with and construed as having benevolent intent. Closeness was also found to be associated with a lessening of distress. However, partial correlations suggested that this association could be accounted for by the relationship that each variable had with benevolence.

Prior to a consideration of lowerness and upperness within the relationship with the voice, it seems important to reiterate that the relating commented upon within this and the preceding section is negative, i.e., it reflects the extent to which the relating of an individual, in this case the voice hearer, falls short of the ideal. Birtchnell (1993, 1999) considers the ideal to be versatility; the ability to move between states of relatedness in response to the interactions of others. The extent to which the relationship with the voice can be construed in positive ways, despite the hearer's apparent lack of versatility, will be discussed at a later point within the section on theoretical integration.

Concerning the axis of power, relating to the voice from a position of lowerness had much in common with closeness. It was reported to occur at similarly low levels relative to the primacy of distance and was associated with both engagement and benevolence. In addition, lowerness was associated with less negative voice content. These findings seem incongruent with Birtchnell's (1993) conceptualisation of lowerness in terms of helplessness and self-denigration. However, the findings were broadly consistent with those of Vaughan (2000) who suggested that relating submissively from a position of lowerness may bring about benefits for the voice hearer. As commented upon within the introduction, such a finding has been reported by Birtchnell & Spicer (1994) with respect to the relating of married couples: women who were in good marriages rated themselves as relating from a more submissive position than those whose marriages were in trouble.

The commonality of the positions of lowerness and closeness extended beyond their correlates to a strongly significant association between the two scales on the YTV. This suggests that the two positions, despite belonging to different axes,



may be measuring a single underlying construct. Birtchnell et al (1992) argues that dependence 'is divisible into a closeness-seeking component and a component concerned with relating from a position of inferiority or weakness' (p.166). It is therefore possible that, in combination, the lowerness and closeness scales of the YTV are measuring the extent to which the voice hearer perceives themselves to be dependent upon the voice.

The final position considered within the voice hearer to voice relationship concerned upperness. As previously mentioned, the internal consistency of this position within the YTV was extremely poor. Results need to be interpreted with caution and will be subjected to the minimum of interpretation. Consistent with the findings of Vaughan (2000), the mean upperness score was found to be in the middle of the range between negative distance and negative lowerness/closeness. Birtchnell (1993) conceptualises upperness in terms of domination and putting down of the other. No associations were found with other measures to corroborate this way of relating. This is likely to reflect the poor psychometric properties of this position on the YTV. However, it may also reflect the limited ability of other measures to represent a more equal or competitive relationship between the voice hearer and the voice. For example, how would the intention of the voice be perceived if it were more of a rival, and therefore neither dominant nor reassuring?

### Mirroring of relationships

This study made four predictions concerning relationships between voice hearers and voices. It was hypothesised that the general style of relating would mirror the way in which the voice was related to within each of the four neutral positions of Birtchnell's (1993, 1999) interpersonal octagon. Each of the hypotheses will now be considered with reference to the axis of relating upon which it is located.

### Axis of power

Birchwood et al (2000) found that differentials in rank and power between the voice hearer and the voice were mirrored in the social world of the voice hearer. It was predicted that a similar mirroring would be found on Birtchnell's axis of power between the general relating style of the voice hearer and the way in which s/he related to the predominant voice. Specifically, this mirroring would be reflected in significant correlations between the neutral positions of upperness within general relating style and upperness in relation to the voice, and lowerness within general relating style and lowerness in relation to the voice.

This study found a significant association between upperness within general relating and upperness in relation to the voice. The association between the positions of lowerness was found to be approaching significance.

Vaughan (2000) drew attention to alternative explanations of associations that may be found when assessing the relationship with the voice: low mood may have led to an increased tendency for individuals to rate their relationships negatively, and beliefs about the voice's malevolence and benevolence may have accounted for the style of relating. Partial correlations were consequently conducted that controlled for depression and beliefs about the voice's malevolence and benevolence. When, in turn, each of these variables were controlled for, the degree to which the voice was related to from a position of upperness remained significantly correlated with upperness within the general relating style. Regarding lowerness, the partialling of depression, malevolence and benevolence scores had the effect of strengthening the association between general relating style and relating to the voice, to the extent that the correlation became statistically significant. The results of the partial correlations suggest that the associations between relating variables exist independently of beliefs about voices and mood linked appraisals.

If general relating style is accepted as the embodiment of past and present interpersonal relationships, and these relationships are driven by some form of

template or schema for relating, these findings offer tentative support for Birchwood et al's (2000) proposal that, with respect to dimensions of power, "social schemata" may be influential in determining the way in which the voice is related to.

#### Axis of proximity

Voices have been found to be either engaged with or resisted, depending on the perception of their intent (Birchwood & Chadwick, 1997; Chadwick & Birchwood, 1994). Benjamin (1989) suggested that the relationship with the voice could mirror interactive patterns within the family. It was therefore predicted that the way in which the voice was related to would mirror the relating of the hearer within the social environment. Specifically, this mirroring would be reflected in significant correlations between closeness within the general relating style and closeness in relation to the voice, and distance within general relating style and distance in relation to the voice.

This study found a significant association between closeness within the general relating style and closeness in relation to the voice. The association between the positions of distance was found to be non-significant.

Following the rationale outlined above, the association regarding the positions of closeness was subjected to partial correlation. The results of the partial correlation suggested that the association between relating variables existed independently of beliefs about voices and mood linked appraisals.

These findings provide some support for the proposal of Benjamin (1989) and Birchwood et al (2000). In combination with the findings from the axis of power, there is evidence to suggest that voices and people within the social environment of the hearer are related to in similar ways. However, this was not the case for the position of distance. Comparison of the data for general relating and relating to the voice revealed a tendency for some of the scores on the YTV distance scale to be higher than those on the PROQ2 distance scale; a pattern that was not present within the positions of upperness, closeness and lowerness. Whilst no attempt has

been made to directly compare profiles of general relating (on the PROQ2) and more specific relating (on the CREOQ, from which the YTV was derived) within a sample, it is likely that lower scores would be reported on measures of specific relationships as it is easier to admit to being negative in one's relating to people in general than to be so in one's relating to a specified other (John Birtchnell; personal communication). This would suggest that the distance scores in relation to the voice were atypically high and indicative of relationships that were extremely distant. This is consistent with the extremely high resistance scores that are commonly reported on the BAVQ (and BAVQ-R).

In summary, the findings from the main hypotheses offer some tentative support for the proposal that voice hearers relate similarly to their voices and to people within their social environments. The difference between the two styles of relating was highlighted by distance; the relatively higher distance scores in relation to the voice being consistent with the conceptualisation of voice relating in other studies.

### Additional findings

A criticism of previous research that was highlighted within the introduction concerned the extent to which it has focussed exclusively upon the voice that the hearer considered to be predominant/dominant. Many individuals hear a number of voices. An understanding of the way in which each voice is related to may further clarify the extent to which voice relating mirrors the complexity and variety of interpersonal relating that exists within the social world. The way in which a subset of participants related to both their predominant voice and one other voice was investigated within this study. The findings differed according to the way in which the data was analysed. No differences were found in relating style when the scores for the neutral positions were compared, but differences for two participants were found when each of the YTVs was compared on an item by item basis. The latter finding may have been attributable to random error. However, despite being internally consistent (with the exception of upperness), different facets of the scales may be tapped by different items. This suggests that individuals who hear multiple voices may relate to each of the voices in ways that

are unique to that relationship. The same may also be true of beliefs about each of the voices and their topographical features, but the investigation of these possibilities was beyond the scope of this study.

Further additional analysis focussed upon the correlates of correspondence between the measure of general relating style and the measure of relating to the voice. If general relating style could be conceptualised as a schema or template (based upon previous experience) that was used to guide the development of relationships, what would be the consequences of relating to the voice in ways that were less familiar, i.e., did not correspond to this template. To this end, a crude measure of correspondence was correlated with beliefs about voices, behavioural and emotional responses and voice topography. The findings suggested that the greater the difference between general relating style and the way in which the voice was related to, the less benevolent the voice was perceived to be, the less it was engaged with and the more depressed the hearer reported themselves to be. These findings tentatively suggest that relating to voices in ways which the hearer is familiar and relatively comfortable with may facilitate the development of a less distressing relationship.

The final additional variable of interest was the identity of the voice and the extent to which it influenced the way in which the voice was related to. Predominant voices were categorised according to the alignment of their perceived identity with 'real' people or supernatural entities. Voices perceived to have no discernible identity were categorised as 'incognito'. Comparisons were made between the way in which each category of voices was related to. Only one significant, yet striking difference was found. Participants who heard 'incognito' voices related to their voices from positions of significantly greater distance. This finding suggests that the furthering of relationship with the voice may be facilitated by its identification. The potential clinical relevance of this will be discussed in detail at a later point.

In summary, additional analysis revealed that (1) multiple voices may be related to with varying degrees of similarity; (2) poor correspondence between general

relating and voice relating may have negative consequences; and (3) being able to attribute an identity to the voice may facilitate a less distant relationship.

### Theoretical integration

The findings from this study will be integrated with theories proposed by Birtchnell (1993, 1999), Birchwood & Chadwick (1997), Drayton, Birchwood & Trower (1998), McGlashan, Docherty & Siris (1976), Romme & Escher (2000) and Vaughan (2000).

Since the development of the influential cognitive model of voices by Chadwick & Birchwood (1994), there has been an evolving dialogue within the research literature about the factors which may mediate the responses of individuals to the voices that they hear. The cognitive model proposed that it was not the content of the voices per se that determined behavioural and emotional responses to the voices, but the beliefs an individual holds about the voices. Since then, research has indicated that the picture is not straightforward. Close & Garety (1998) questioned the mediating role of beliefs after observing them to be consistent with voice content in 100% of participants. A similar relationship was found within the current study. As an alternative, they proposed a role for low self esteem in the development and maintenance of responses to voices.

Recognition of the inherently relational nature of the voice hearing experience has moved the dialogue beyond inward looking, individualistic constructions to incorporate the significance of the interaction between the voice hearer and his/her social world. Benjamin (1989) was the first to suggest that patterns of relating within the family bore similarities to the interaction between the voice hearer and the voice. Whilst the political climate of the time may not have allowed this proposal to be heard, the influence of social variables has more recently been espoused by Thomas (1997) who suggested that the voice was identifiable as an interpersonal 'other', the relationship with whom was influenced by aspects of past and present social relationships. The emotional responses of the hearer to this relationship were investigated by Vaughan (2000), who reported

distress to be maximised by a relationship in which the hearer attempted to escape from a voice that was perceived to be dominant and bullying. The influence of past and present social relationships was investigated for the first time by Birchwood et al (2000). Voice hearers were found to perceive themselves as low in rank and power relative to both voices and significant others within the social environment.

This study attempted to extend the findings of Birchwood et al (2000) to the previously neglected dimension of proximity within interpersonal relating. In doing so, tentative support was found for Birchwood & Chadwick's (1997) hypothesis that interpersonal schema, as the embodiment of past interpersonal relationships, influence the way in which the voice is perceived and responded to. Using Birtchnell's (1993, 1999) theory, general (social) relating was found to be associated with voice relating on both poles of the power axis and on one pole of the axis of proximity. Therefore, rather than a unique attempt to manage a novel interpersonal experience, the type of relationship that is developed with the voice may be influenced by more pervasive patterns of social relating.

To both Birchwood et al (2000) and Birtchnell (1999), social relationships are determined by early experiences of relationships and attachments with significant others. Birtchnell (1993) speaks of the role of parents and early influential figures in the acquisition of confidence and competence within each of the positions of his interpersonal octagon, while Birchwood draws upon a cognitive conceptualisation of Bowlby's (1969) internal working model: Safran & Segal's (1990) interpersonal schema. As an abstraction from interactions with attachment figures, the interpersonal schema is held to be like a program that enables the infant to meet the biologically wired-in goal of maintaining relatedness to others. An individual may develop different interpersonal schema for people who play different roles in their lives (e.g., authority figures), each of which is embedded within a higher level more abstract and generalised schema.

It is beyond the scope of this discussion to consider in any detail the influences upon social relating and the temporal origins of any schema for the meeting of interpersonal needs. However, an attempt to link early experience with responses

to psychotic experiences was made by Drayton et al (1998) who attempted to bring together theoretical strands from the study of attachment styles, depression and recovery from psychosis. They hypothesised and found support for an association between style of attachment and style of recovery; participants who related ambivalently and timidly (insecure attachment) as a result of parenting that was extremely controlling and lacking in affection, were more likely to disconnect their psychotic experiences from their life history and make no effort to understand the symptoms (sealing-over style of recovery). Associations between attachment experiences, recovery style and negative self evaluations led Drayton et al (1998) to suggest that disturbed family relationships in infancy threaten the development of a secure sense of self and lead to negative self evaluation. The diagnosis of psychosis consequently presents a threat to the self that cannot be tolerated. Rather than attempt to understand and take responsibility for the psychotic experiences, the only available coping strategy is to disown and isolate them.

The study of Drayton et al (1998) potentially extends the findings of this study by suggesting that any connection that may exist between social relating and responses to psychotic experiences may be rooted in the relational exchanges of childhood.

The styles of recovery cited by Drayton et al (1998) were first articulated by McGlashan et al (1976). Though referring to psychotic experiences more generally, there seem to be parallels with the patterns of relating to voices that were discovered within this study. McGlashan et al (1976) used the term 'sealing over' to describe a response to psychosis whereby psychotic experiences are viewed as alien and encapsulated in an attempt to separate them from personal problems; the individual lacks curiosity regarding their experiences and makes little attempt to engage others in a process of discovery. This style of recovery seems to have much in common with relating uncommunicatively from a position of distance to a voice treated with suspicion and construed as negative with respect to content and intention. Integration, on the other hand, is characterised by McGlashan et al (1976) as a process of continuity; the individual is aware of the connections between the psychotic experiences and their life history, uses the



experiences as a source of information not usually available to him/her and elicits the help of others in attempting to understand it. This style of recovery seems to have much in common with relating dependently and submissively from positions of closeness and lowerness to voices construed as positive in content and intent. However, continuity may be more concerned with present and future, rather than past lifestyles, as the voice may act as a guide and counsellor who provides information about current problems and future directions.

Prior to proposing a model that attempts to incorporate the findings of this study into the existing psychological literature, the issue of voice identity warrants consideration. Somewhat unexpectedly, voices that were not attributed an identity were related to from a position of significantly greater distance. As greater distance was associated with resistance, it is tempting to suggest that 'incognito' voices, as strangers, evoke suspicion and attempts are made to escape from them. Birtchnell suggests that the influence of identity is not so straightforward; rather, it is the interaction of identity with the degree of threat that creates the need for distance (John Birtchnell, personal communication). This possibility is supported by the data from this study as hearers of incognito voices reported a greater (though non-significant) amount of negative voice content than the hearers of identifiable voices.

A model that incorporates the above into the existing understanding of the voice hearing experience is now tentatively offered.

There is growing evidence from experimental studies to support the proposals of Birchwood & Chadwick (1997) and Benjamin (1989) that relationships with voices may reflect patterns of relating within the social world of the hearer. Therefore, the way an individual relates to his/her voice may be influenced by past and present experiences of interpersonal contact. If the voice is identifiable, either through alignment with a person in the real world, or as a supernatural entity, it is likely that interpersonal schema, at varying levels of abstraction, will be activated and influence the way in which the voice is related to. If the hearer's previous experience of social relating has been impoverished, his/her general relating style may lack versatility, and s/he may relate rigidly (negatively) from

whichever position (either dependence or distance) had previously been utilised 'successfully' within a relationship with someone who played that type of role. Unidentified voices, on the other hand, may require an inference from content as to their intent, prior to the activation of a program capable of maintaining relatedness and meeting the interpersonal needs of the hearer. If the content of the voice is predominantly negative, the selected program may guide behaviour towards attempts at keeping a safe distance from a voice perceived as dominant and bullying.

This study was not able to clarify the extent to which responses to voices are mediated by relating to the voice, beliefs about the voice's intent and beliefs about the self, or interactions thereof. However, two broad patterns of responding seemed to emerge that elaborated upon previous models of responses: (1) becoming involved with and dependent upon a voice construed as a source of potential benefit; and (2) attempting to escape from and encapsulate a relationship perceived as potentially harmful. What all voice relationships within this sample seemed to have in common was the extent to which the hearer related negatively to the voice, even if the relationship was construed in positive ways: negative in this sense referring to the hearer's style of relating being the only (relatively comfortable) one that s/he could have chosen, and one from which s/he relates rigidly.

### Clinical implications

If the aim of psychological intervention for voice hearers is to ameliorate or alleviate distress and social handicap, the achievement of this goal will be preceded by the development of an individual case formulation that enhances understanding of the variables within the voice hearing experience that mediate distress. Variables that have been demonstrated to be influential in this respect include beliefs about voices, beliefs about the self and existing coping strategies. A measure of each of these variables is available to the clinician as an adjunct to the clinical interview (BAVQ-R, Chadwick, Lees & Birchwood, 2000; Evaluative Beliefs Questionnaire, Chadwick, Trower & Dagnan, 1999; and Antecedent and

Coping Questionnaire, Tarrier, 1992), respectively). This study has added to the developing evidence base that is suggestive of a role for relating variables in the mediation of distress. The addition of a measure of relating within the voice hearing experience, the YTV, may consequently be a useful addition to clinical practice. It may also enhance the curiosity of an individual and act as a catalyst to a move towards a more integrated relationship with the voice.

Regarding intervention, the findings from this study indicate that there may be two ways of working therapeutically to modify the relationship with the voice. The first has been touched upon by Birchwood et al (2000) and involves working at the level of social relating. This may include attempts to improve individual social status through group identification, assertiveness training and problem solving therapy; such interventions having the potential to influence the relationship with the voice through improvement in interpersonal schema and self esteem. Intervention directed at the modification of social schemata or general relating style may also facilitate the development of social resources (non-kin relationships), which have been shown to be associated with a lessening of distress amongst voice hearers (Romme & Escher, 1993) and better outcome in schizophrenia (Erikson, Beiser & Lacono 1998).

The second route to modification of the relationship with the voice may be to work more directly on that particular relationship. An important variable in this respect may be the identity of the voice. If the individual is unaware of the identity of the voice, and relates to it from a position of distance as a consequence, careful assessment may reveal similarities between the interpersonal behaviour and characteristics of the voice, and those of someone (or something) in the social world of the voice hearer. The identification of the voice in itself may facilitate the moving away from a position of distance and the entering into relationship with the voice. Further exploration of the relationship may reveal historical connections with a 'real' person or a traumatic event, and the integration of this information into the life of the hearer may lead to the development of new narratives surrounding previously unexplored sources of distress. Such an approach is pivotal to the work of Romme & Escher (2000) who suggest that the identity of the voice plays an important role in the development of a 'construct'

that helps the hearer to make sense of their voices by connecting current and past experience.

Of course, an approach which encourages the exploration of the voice's identity and its possible connection to life experiences will need to be carried out sensitively and form part of a longer term therapeutic process aimed at supporting the hearer in the development of less distressing relationships with the voices. Embarking on such a process must also be done with two caveats in mind. Firstly, relating to the voice from a position of distance should not be pathologised without reference to levels of distress and depression. There is tentative evidence within this study to suggest that successfully keeping the voice at a safe distance may bring affective benefits to the hearer and represent an adaptive method of coping that may not require modification. Secondly, Benjamin (1989) warns that a process of investment in the voice may have detrimental effects on the psychological well-being of the hearer. This point is argued in the context of relationships with voices being construed as alternatives to less satisfactory social relationships: investment in the voice representing a further distancing from unchanging social circumstances and a reduction in the likelihood of these circumstances being reconnected with in the future. This seems to suggest that it is not sufficient to modify only the relationship with the voice; the social circumstances of the hearer and their interaction with other people also needs to change.

A very different process was reported by Davis et al (1999) regarding the case of Peggy. Rather than distancing herself further from her social environment, the opening of a dialogue with the voices facilitated engagement with positive aspects of it, in the form of support from her friend and therapist, which were internalised as a voice that mediated between her and the commanding voices.

The relative merits of working more directly at the level of voice relating or social relating remain unclear and will only be clarified by further research. What the work of Benjamin (1989) and Davis et al (1999) suggest is that, consistent with the findings of this study, relating to the voice cannot usefully be separated from the interaction of the hearer with their social environment. Any therapeutic

process will consequently need to intervene in one domain whilst maintaining an awareness of the influence of and effect upon the other.

Each of the therapeutic processes described above presuppose an ability on the part of the voice hearer to enter into a dialogue about his/her voices and explore their meaning in the context of life experiences. The clinical reality of working with people who often find it difficult to engage therapeutically may be very different. McGlashan (1987) suggests that, with regard to psychosis, the adoption of an integrative approach may be neither possible nor necessary. This suggestion is based upon longitudinal findings which indicate that: (1) recovery styles are “personality styles” that are relatively enduring across long periods of an individual’s adult life; and (2) good outcome can be had with each style of recovery, though more likely with integration. McGlashan (1987) concluded from these findings that ‘a goal of treatment should not be that of altering a patient’s particular coping style. Rather, optimal treatment planning should aim at *matching* intervention with recovery style’ (p.684; italics in the original).

If the proposals of McGlashan (1987) are applied to people who hear voices, an individual who relates to their voice predominantly from a position of distance may be more responsive to treatment approaches that focus away from the voices and concentrate on minimising distress through the attainment of a safe distance, e.g., distraction. For those who relate dependently to their voices from positions of closeness and lowerness, an exploration of the ways in which the voice interacts with their life experience (e.g., focussing) may be the treatment of choice. In such instances, one of the roles of a measure of relating to the voice (the YTV) within an assessment, akin to that of the Recovery Style Questionnaire (Drayton et al, 1998) in psychosis, may be the identification of the treatment that is most likely to engage the client.

In the absence of therapeutic intervention the hearer may have two broad choices regarding the way in which s/he relates to the voice: distantly or dependently. Whilst the latter style of relating may be experienced as relatively positive, it may represent a passive acceptance of the imposed intimacy of a voice following unsuccessful attempts at resistance and control (Birchwood & Chadwick, 1997).

The literature suggests that voices can change (Benjamin, 1989; Nayani & David, 1996). The aim of any intervention, regardless of its nature or the level at which it seeks to effect change, must be to extend that range of options to include the possibility of relationships, both social and with the voice, within which the hearer can play a potentially more active role.

### Limitations of research design and methodology

#### Critique of YTV

The internal consistency of the YTV was commented upon at the beginning of this discussion and was found to be acceptable for three of the four scales: closeness, lowerness and distance.

Further analysis of the YTV focussed upon the extent to which each of its scales were independent of each other. Intercorrelations for the current sample suggested that there was a degree of independence between each of the scales, with the exception of the association that was found between the scales of lowerness and closeness. A significant positive correlation between these two scales suggested that they may be measuring a single underlying factor, possibly dependence. A similar correlation was also reported by Vaughan (2000). However, she also found significant associations between the scales of distance and upperness, distance and lowerness, and upperness and lowerness. This suggests that more distinct style of relating to the voice from a position of dependence may not generalise from the current sample. A factor analysis on a larger sample is necessary to clarify these issues.

Concerning validity, Vaughan (2000) reported that: (1) participants had no difficulty relating the questionnaire to their relationships with their voices (face validity); (2) associations with the subscales of the BAVQ and PSYRATS were largely as predicted (construct validity); and (3) the scales were useful in discriminating between groups of people in terms of distress (discriminant validity). Within the current study some inconsistencies were found. The possible

reasons for the inability of the scales of the YTV to discriminate in terms of distress have been discussed at an earlier point in this discussion. The issues relating to face and construct validity will now be briefly considered.

The ability of participants within this study to consider their voices in interpersonal terms was not universal and, as previously commented upon, was least apparent in relation to upperness. This study differed from the study of Vaughan (2000) in that only relating, and not interrelating was considered. If individuals find it difficult to consider their experience of voice hearing as in any way relational, it is suggested that their (as opposed to the voice's) contribution to that relationship is likely to be the least intuitive. Being related to, on the other hand, may be more apparent, and the inclusion of a measure of the way in which the voice relates to the hearer (the VTY: which was administered by Vaughan, 2000, prior to the YTV) may attune the participants to the possibility of their responses being relational in nature. Future studies may consequently need to assess interrelating through the use of both measures of relating.

Concerning construct validity, one of the most prominent inconsistencies related to the non-significant association between malevolence on the BAVQ-R and distance on the YTV. This finding is possibly attributable to the more sensitive response scale that is available on the BAVQ-R. Rather than being required to respond dichotomously on the issue of the voices malevolent intent, participants were able to express their uncertainty through the selection of a less extreme response (either 'unsure' or 'slightly agree') in the mid-range of the four point likert scale. Such a possibility is consistent with the reservations of Close & Garety (1998) and Vaughan (2000) about the ability of the BAVQ to represent the whole range of beliefs about voices.

Final criticisms of the YTV relate to the specific wording of some of its items and the response scale. Vaughan (2000) reported that item 28 ('I do not give my voice credit for the good things that it suggests') was difficult for many participants to answer. The same difficulty was experienced by participants within the current study. In addition, item 24 ('I feel uneasy when my voice plans things independently of me') generated uncertainty. What each of these items have in

common is grammatical complexity and a degree of implausibility. Foddy (1993) warns against the use of questions where one half of the question makes sense by itself and can be answered without due consideration of the second half. As the possible implausibility of the aforementioned questions related to the latter part of the question, it is possible that participants were responding to only its first half.

A further structural complexity that may have caused confusion within the YTV concerned the use of negatives within both the response scale and some of the items. This could have led to double negatives which required translation in order to avoid participants inadvertently responding in the opposite ways to that which they had intended, e.g., when considering item number five 'I don't communicate very much with my voice', a participant may think "No, I don't communicate much with my voice" and respond 'mostly no' which, in this instant, would indicate that the voice is communicated with. There were seven items within the YTV that could interact with the response scale to create double negatives. Within this study, verbal clarification of the participants intended response was sought after each of these items. However, a more satisfactory alternative would be the modification of the response scale of the YTV to a range of 'Nearly always true' to 'Rarely true'. Such a step was taken by Birtchnell (1999) after respondents were confused by the 'mostly yes' to 'mostly no' scale on the original version of the PROQ2.

In summary, the findings from this study suggest that the YTV has acceptable reliability and validity with respect to three of its four scales. It is likely to be most usefully deployed as part of an assessment of interrelating between the hearer and the voice. However, modifications will first need to be made to reduce structural complexity of some of its items and the response scale. Further investigation of its psychometric properties, e.g., test-retest reliability and factor analysis, is also necessary.

#### Critique of Birtchnell's theory of relating

This study attempted to investigate relationships with voices within an interpersonal framework that was considered to be intuitive and accessible.



However, the concept of negative relating has, at times, been a source of considerable confusion. This was most notable with respect to the positive construal and experience of voices related to from positions of negative closeness and lowerness. It has been suggested that becoming dependent upon the voice may represent a positive alternative to persistent unsuccessful attempts at maintaining a safe distance. Does this represent a way in which relating to voices, as intrapsychic 'others', differs from ordinary interpersonal relationships, i.e., voices cannot be related to positively? The lowerness reported by women in 'healthy' marriages would suggest otherwise; negative relating from certain positions can also be an adaptive response to an intimate social relationship which cannot easily be modified or escaped from.

The question remains as to whether voices can be related to positively in the way that Birtchnell considers that people can. If positive relating concerns the chosen and temporary occupation of a reciprocal position in response to the relating of another, this question may need to be addressed by voice hearers who have successfully negotiated a more equal relationship with their voices. Such people rarely seek help from mental health services as their voices are not a source of distress. Recruitment to a study of this nature may consequently be very challenging.

Regarding Birtchnell's (1999) measures of negative relating, it is a matter of curiosity that, in the seven years since the development of the CREOQ, no attempt has been made to explore the possible correspondence between general relating tendencies (as measured by the PROQ2) and relating to specific others (as measured by the CREOQ). This made the differences in mean score between the PROQ2 and the YTV difficult to interpret. In relation to couple therapy, Birtchnell (2001) states that in addition to the CREOQ 'It would be possible to give each partner the PROQ as well, though this is not usually done' (p.74). This seems to suggest that, in clinical practice, the extent of correspondence is possibly of limited interest. For example, if a couple present for therapy with specific styles of relating to each other that are extremely negative, their general style of relating may be considered to be of secondary importance. The assumption here may be that relationships with significant others, from which general relating is

thought to be aggregated, may exemplify general relating tendencies. This assumption needs to be examined empirically. Also, it is argued within this study, at least with respect to voice relationships, that change at the level of general relating may be essential in effecting change within specific relationships. An exclusive therapeutic focus upon specific relationships may consequently limit the degree of change and the extent of generalisation to other relationships.

Without some form of normative figure regarding correspondence between general and specific relating, it was difficult to assess how much of the richness of the relationship with the voice was represented within a more generalised measure of relating. At odds with the main hypotheses, this may have led, at times, to this study focussing on the relationship with the voice to a degree that was not intended.

### Design issues

As previously stated, this study was correlational in design and therefore caution needs to be exercised when findings are interpreted. Direction of causality could not be discerned from the findings. Also, the sample was small relative to the size of the samples of many of the other studies cited. Future explorations of the relationships that individuals develop with their voices should attempt to investigate the experiences of a larger number of participants and should do so within a design that facilitates the discernment of the direction of causality.

A source of concern prior to the commencement of the study was the number of questions that participants were required to respond to (approximately 200 in total). Of particular concern were the items relating to the intermediate positions on the PROQ2 that were not used within the analysis. These items were included to preserve the psychometric properties of the PROQ2 and their presence did not seem to inhibit completion of the questionnaire which was achieved by the participants with ease and speed relative to the slightly less intuitive enquires of the YTV. However, a short form of the PROQ2 is currently being developed which has only 48 items (the PROQ3; John Birtchnell, personal communication).

Future research regarding the general relating styles of voice hearers should attempt to utilise this more 'user friendly' version of the PROQ2.

A reduction in the number of questions that participants were required to answer may have allowed for the completion of a measure of positive and negative symptoms. Such a measure is recommended by Vaughan (2000) to assess the role that symptom severity may play in influencing styles of relating to voices.

Participants within this study were asked to talk about their predominant voice. By their very nature, such voices are likely to be perceived as being more powerful and influential than other voices. In common with many of the other studies referred to in the introduction, this study was biased towards a consideration of a particular subset of voices. Many people hear a number of voices. An attempt was consequently made to assess variations in relationships that may exist between an individual and the differing voices that s/he hears. The aforementioned constraint upon the use of additional measures restricted this assessment to a consideration of the way in which a second voice was related to. The analysis tentatively suggested that different voices heard by an individual could be related to with varying degrees of similarity. However, data was collected from a very small sample and this finding must be viewed with caution. Future research should attempt to investigate this issue within a larger sample and additionally consider the beliefs about each voice and their topographical features.

A final limitation of the design of this study concerned an exclusive focus upon current relationships with voices. There is some evidence within the research literature to suggest that relationships with voices can change over time (Benjamin, 1989; Birchwood & Chadwick, 1997; Nayani & David, 1996). A consideration of this issue was beyond the scope of this study. A longitudinal study may most effectively capture the changes that occur within these relationships. It would be anticipated that change would involve either the attainment of a safe distance from the voice or the eventual acceptance by the hearer of the voice's imposed intimacy, following unsuccessful attempts to resist and control it. Of considerable interest would be the extent to which psychological

intervention could facilitate changes within the relationship that did not result in the hearer relating negatively from positions of either dependence or distance.

### Summary and conclusions

This study has explored the ways in which individuals relate to the voices that they hear and the extent to which these relationships mirror social relationships. Four hypotheses were examined and two were confirmed. Support for a third hypothesis was found once other variables were controlled for. Together, these findings offer tentative support for the idea that individuals relate in similar ways to their voices, construed as interpersonal 'others', and people within their social environment.

One exception to the mirroring of relationships concerned the extent to which voices were related to from positions of greater distance. This style of relating seemed to represent an attempt at keeping the voice at a safe distance, particularly voices whose identity was unknown. A further style of relating that emerged concerned the development of dependency upon a voice believed to be benevolent in intent.

The findings from this study have implications for psychological input at the level of assessment and intervention. The assessment of the way in which the individual relates to his/her voice will indicate which of the growing range of effective psychological interventions for voice hearers, is most likely to be engaged with. The identification of the voice may also effect a less distant relationship with it. Regarding intervention, it is suggested that a focus upon change at the level of general relating may have the potential to positively influence both the relationship with the voice and relationships within the social environment.

A number of directions for future research have been identified. Of particular importance is the modification of the measure of relating to voices and the subsequent further exploration of its psychometric properties. Larger scale studies of the mirroring of social and voice relationships would be of value, especially if

designs could facilitate investigation of the direction of causality. More focussed possibilities for future studies would include the further examination of the influence of voice identity upon relating.

## APPENDIX 1

### Demographic sheet

## **Demographics Sheet**

Name:

Age:

Gender:

Date of birth:

Duration of voice hearing experience:

Current diagnosis:

Number of hospital admissions:

Current medication:

## APPENDIX 2

### Semi-structured interview



## Semi-structured Interview

How many voices do you hear?

**Ask the following questions in relation to predominate voice only.**

- 1) Is the voice a man or a woman, or are you unsure?
- 2) Do you have any idea whose voice you hear?
- 3) Does the voice talk to you or about you?
- 4) Can you tell me what kinds of things the voice says (two or three recent examples)?

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- 5) Explore if the voice ever says the following:

Commands – Does the voice ever tell you to do something?

---

---

Advice – Does the voice ever give you advice or suggestions?

---

---

Commentary – Does the voice ever comment upon what you are doing or thinking?

---

---

Criticism & abuse – Does the voice say unpleasant things about you or someone else?

---

---

Hostility – Does the voice ever threaten to harm you or someone else?

---

---

- 6) When was the last time you heard this voice?

## **APPENDIX 3**

### **You To Voice (YTV)**

# YTV

## **A PERSON'S ASSESSMENT OF THEMSELVES IN RELATION TO THEIR PREDOMINANT VOICE**

### **PLEASE READ THIS BEFORE YOU START**

The statements listed here are the sorts of feelings and attitudes which people sometimes have about or towards the voices that they hear. Please read each statement carefully and indicate, by ticking the appropriate column, the extent to which you think it applies to you in relation to your predominant voice.

Try to be completely frank and honest about yourself. Avoid answering the way you would like to be or the way you would like others to think of you, rather than the way you really are.

Try as far as possible, to place your ticks in the "Mostly yes" and "Mostly no" columns. The two middle columns are really for if you cannot make up your mind.

Please make sure that you have not missed a page and that you have put a tick against every statement.

|   | Mostly yes | Quite often | Sometimes | Mostly no |
|---|------------|-------------|-----------|-----------|
| 1. I hold on to my voice too much                               |            |             |           |           |
| 2. I can be very critical of my voice                           |            |             |           |           |
| 3. I prefer to keep my voice at a safe distance                 |            |             |           |           |
| 4. I allow my voice to take control of me                       |            |             |           |           |
| 5. I don't communicate very much with my voice                  |            |             |           |           |
| 6. I say quite hurtful things to my voice                       |            |             |           |           |
| 7. I try not to let my voice get the better of me               |            |             |           |           |
| 8. I try not to show my voice my feelings                       |            |             |           |           |
| 9. It is easy for my voice to change my mind                    |            |             |           |           |
| 10. I do not like to get too involved with my voice             |            |             |           |           |
| 11. I have a tendency to look up to my voice                    |            |             |           |           |
| 12. I need to have my voice around me a great deal              |            |             |           |           |
| 13. My voice's judgement is better than mine                    |            |             |           |           |
| 14. I'm afraid I do not pay my voice much attention             |            |             |           |           |
| 15. I look to my voice for guidance                             |            |             |           |           |
| 16. I prefer my voice to make my decisions for me               |            |             |           |           |
| 17. I am inclined to think of my voice as stupid                |            |             |           |           |
| 18. When my voice gets too close to me, it makes me feel uneasy |            |             |           |           |
| 19. I ask my voice to help me solve my problems                 |            |             |           |           |
| 20. I like to get my own way with my voice                      |            |             |           |           |

|  | Mostly yes | Quite often | Sometimes | Mostly no |
|--|------------|-------------|-----------|-----------|
| 21. My voice helps me make up my mind                                      |            |             |           |           |
| 22. I can be very demanding of my voice's attention                        |            |             |           |           |
| 23. I like to be in control of my voice                                    |            |             |           |           |
| 24. I feel uneasy when my voice plans things independently of me           |            |             |           |           |
| 25. I find it hard to admit to my voice that I am wrong sometimes          |            |             |           |           |
| 26. When my voice is absent, I feel anxious until it returns               |            |             |           |           |
| 27. I let my voice take responsibility for me                              |            |             |           |           |
| 28. I do not give my voice credit for the good things that it suggests     |            |             |           |           |
| 29. I am not inclined to spend much time listening to my voice             |            |             |           |           |
| 30. I tend to escape from my voice into a world of my own                  |            |             |           |           |
| 31. I upset my voice by trying to stay too close to it                     |            |             |           |           |
| 32. My voice is more often right than I am                                 |            |             |           |           |
| 33. I find it hard to let my voice have time to itself                     |            |             |           |           |
| 34. I have difficulty letting go of my voice                               |            |             |           |           |
| 35. I try to make decisions for us both                                    |            |             |           |           |
| 36. I don't like my voice to know what I am thinking                       |            |             |           |           |
| 37. I don't really feel I have much to offer my voice                      |            |             |           |           |
| 38. I have a great need to talk to my voice                                |            |             |           |           |
| 39. It upsets me when my voice does not let me do things the way I want to |            |             |           |           |
| 40. I feel deserted when my voice is not around                            |            |             |           |           |

## **APPENDIX 4**

**Additional information regarding the adaptation of the You To Voice (YTV) from the  
Couples Relating to each Other Questionnaire (CREOQ)**

## Additional information regarding the adaptation of the YTV from the CREOQ

In the absence of a questionnaire to measure relationships with voices, the YTV was adapted by Vaughan (2000) from the Couple's Relating to Each Other Questionnaire (CREOQ; Birtchnell, 1993).

Originally developed to assess the relationship between two specific individuals, e.g., husband and wife, the CREOQ comprised two questionnaires measuring 'relating' and 'being related to'. Cronbach's alpha for the four CREOQ questionnaires was above .7 for 27 of the 32 scales (four sets of eight; Birtchnell, 1999). However, as the CREOQ was a 96 item questionnaire, the length of which was considered impractical, it was shortened by Vaughan (2000) in consultation with its author, John Birtchnell, Senior Lecturer in Psychiatry at the Institute of Psychiatry. In the absence of a factor analysis the process of reducing the number of items was based upon the good internal reliability of the CREOQ and theoretical knowledge concerning beliefs and power issues related to voice hearing. Some items were also amended to take account of the extent to which the voices were not of the solid, tangible form of the human 'other' to which the questions originally applied. As the questionnaires needed to be sensitive to the gender of the voice, there were two versions of the YTV whose items were identical but for the use of male and female pronouns.

## **APPENDIX 5**

### **The Person's Relating to Others Questionnaire – Revised Version (PROQ2)**



# PROQ 2

## THE PERSON'S RELATING TO OTHERS QUESTIONNAIRE

### **PLEASE READ THIS BEFORE YOU START**

The statements listed here are the sorts of feelings and attitudes which people sometimes have about or towards other people. Please read each statement carefully and indicate, by ticking the appropriate column, the extent to which you think it applies to you.

Try to be completely frank and honest about yourself. Avoid answering the way you would like to be or the way you would like others to think of you, rather than the way you really are.

Try, as far as possible, to place your ticks in the "Nearly always true" and "Rarely true" columns. The two middle columns are really for if you cannot make up your mind.

Please make sure that you have not missed out a page and that you have put a tick against every statement.

Nearly  
always  
true

Quite  
often  
true

Some  
times  
true

Rarely  
true

|  |  |  |  |  |
|--|--|--|--|--|
| 25. I have a dread of being rejected                                   |  |  |  |  |
| 26. I can be quite ruthless when I need to be                          |  |  |  |  |
| 27. I am more a follower than a leader                                 |  |  |  |  |
| 28. I cannot resist trying to help those in need                       |  |  |  |  |
| 29. When people I like go away I long for their return                 |  |  |  |  |
| 30. It annoys me when people will not do what I expect of them         |  |  |  |  |
| 31. I have no difficulty doing what people tell me                     |  |  |  |  |
| 32. I tend to get back at people who offend me                         |  |  |  |  |
| 33. I cannot bear to be left on my own                                 |  |  |  |  |
| 34. I don't like to argue with people in case they end up disliking me |  |  |  |  |
| 35. I need a lot of close contact with others                          |  |  |  |  |
| 36. I prefer it when someone else is in control                        |  |  |  |  |

Nearly  
always  
true

Quite  
often  
true

Some  
times  
true

Rarely  
true

|  |  |  |  |  |
|--|--|--|--|--|
| 37. Caring for others is something which comes naturally to me |  |  |  |  |
| 38. I enjoy spending time on my own                            |  |  |  |  |
| 39. I appreciate it when others tell me what to do             |  |  |  |  |
| 40. I have to come out on top                                  |  |  |  |  |
| 41. I get too involved with people I like                      |  |  |  |  |
| 42. I am easily put down by other people                       |  |  |  |  |
| 43. I do not let people get away with insulting me             |  |  |  |  |
| 44. People know they can always turn to me for help            |  |  |  |  |
| 45. I respect those in authority                               |  |  |  |  |
| 46. I don't like to be the one who gives in                    |  |  |  |  |
| 47. I easily tire of other people's company                    |  |  |  |  |
| 48. I seem to need a lot of looking after                      |  |  |  |  |

Nearly  
always  
true

Quite  
often  
true

Some  
times  
true

Rarely  
true

|   |  |  |  |  |
|---|--|--|--|--|
| 49. When I tell people what to do I expect them to do it            |  |  |  |  |
| 50. I can never be sure that people approve of me                   |  |  |  |  |
| 51. I leave it to others to make the decisions                      |  |  |  |  |
| 52. I find it easy to be affectionate                               |  |  |  |  |
| 53. I don't like others to know too much about me                   |  |  |  |  |
| 54. I get annoyed if people stand in my way                         |  |  |  |  |
| 55. I don't trust people very easily                                |  |  |  |  |
| 56. When there's a confrontation I back off                         |  |  |  |  |
| 57. I want to reach out to people in trouble                        |  |  |  |  |
| 58. I don't take too much notice of other people                    |  |  |  |  |
| 59. I am inclined to put people in their place                      |  |  |  |  |
| 60. I feel uncomfortable if things are not done the way I want them |  |  |  |  |

always  
true

often  
true

times  
true

Rarely  
true

|   |  |  |  |  |
|---|--|--|--|--|
| 61. I can be very caring when I need to be                                |  |  |  |  |
| 62. I tend to look to others for guidance                                 |  |  |  |  |
| 63. I find it best to keep out of other people's way                      |  |  |  |  |
| 64. I can't help fussing over someone I feel close to                     |  |  |  |  |
| 65. Looking up to someone is something which comes easily to me           |  |  |  |  |
| 66. I know that there are people I can turn to if I need to               |  |  |  |  |
| 67. I find it hard to tolerate people standing between me and what I want |  |  |  |  |
| 68. If I can't do something I find someone who can show me                |  |  |  |  |
| 69. I try to arrange things so that people do what I want                 |  |  |  |  |
| 70. I can't just stand by when I realise that someone needs help          |  |  |  |  |
| 71. When there's an argument I tend to give in                            |  |  |  |  |
| 72. I am afraid that people are going to lose interest in me              |  |  |  |  |

Nearly  
always  
true

Quite  
often  
true

Some  
times  
true

Rarely  
true

|   |  |  |  |  |
|---|--|--|--|--|
| 73. I am willing to go along with whatever other people say         |  |  |  |  |
| 74. I can't say "No" when it comes to helping other people          |  |  |  |  |
| 75. I don't like to be too involved with people                     |  |  |  |  |
| 76. I am prepared to stand up for my rights                         |  |  |  |  |
| 77. I feel drawn to people who are worse off than myself            |  |  |  |  |
| 78. I don't feel I've very much to offer other people               |  |  |  |  |
| 79. I tend to get so close to people I can't bear to let go of them |  |  |  |  |
| 80. When things go wrong I'm inclined to think it's my fault        |  |  |  |  |
| 81. I tend to bully people  |  |  |  |  |
| 82. I feel lost when there is no-one to turn to for advice          |  |  |  |  |
| 83. If you get too close to people they always let you down         |  |  |  |  |
| 84. If I have to, I can take control of a situation                 |  |  |  |  |

Nearly  
always  
true

Quite  
often  
true

Some  
times  
true

Rarely  
true

|   |  |  |  |  |
|---|--|--|--|--|
| 85. I tend to put other people's needs before my own            |  |  |  |  |
| 86. I try not to let others get the upper hand                  |  |  |  |  |
| 87. I do not retaliate when others insult me                    |  |  |  |  |
| 88. I find it pleasant to get away from people                  |  |  |  |  |
| 89. Rather than risk criticism I say nothing                    |  |  |  |  |
| 90. Getting my own way is very important to me                  |  |  |  |  |
| 91. I can be very critical of other people                      |  |  |  |  |
| 92. I prefer to keep people at a safe distance                  |  |  |  |  |
| 93. When people disagree with me I argue with them              |  |  |  |  |
| 94. I do not let people get too close to me                     |  |  |  |  |
| 95. I find it helpful when I can cry on someone else's shoulder |  |  |  |  |
| 96. I let other people organise my life for me                  |  |  |  |  |

## **APPENDIX 6**

### **Psychotic Symptoms Rating Scale (PSYRATS - Auditory Hallucinations Scale)**

## **Psychotic Symptoms Rating Scale (PSYRATS: Auditory hallucinations scale)**

### **1 Frequency**

- 0 Voices not present or present less than once a week
- 1 Voices occur at least once a week
- 2 Voices occur at least once a day
- 3 Voices occur at least once an hour
- 4 Voices occur continuously or almost continuously, i.e., stop only for a few seconds or minutes

### **2 Duration**

- 0 Voices not present
- 1 Voices last for a few seconds, fleeting voices
- 2 Voices last for several minutes
- 3 Voices last for at least one hour
- 4 Voices last for hours at a time

### **3 Location**

- 0 No voices present
- 1 Voices sound like they are inside head only
- 2 Voices outside the head, but close to ears or head. Voices inside the head may also be present
- 3 Voices sound like they are inside or close to ears and outside head away from ears
- 4 Voices sound like they are outside the head only

### **4 Loudness**

- 0 Voices not present
- 1 Quieter than own voice, whispers
- 2 About same loudness as own voice
- 3 Louder than own voice
- 4 Extremely loud, shouting

### **5 Beliefs re-origin of voices**

- 0 Voices not present
- 1 Believes voices to be solely internally generated and related to self
- 2 Holds <50% conviction that voices originate from external causes
- 3 Holds >50% conviction (but <100%) that voices originate from external causes
- 4 Believes voices are solely due to external causes (100% conviction)

### **6 Amount of negative content of voices**

- 0 No unpleasant content
- 1 Occasional unpleasant content (<10%)
- 2 Minority of voice content is unpleasant or negative (<50%)
- 3 Majority of voice content is unpleasant or negative (>50%)
- 4 All of voice content is unpleasant or negative

### **7 Degree of negative content**

- 0 Not unpleasant or negative
- 1 Some degree of negative content, but not personal comments relating to self or family, e.g., swear words or comments not directed to self, e/g/, 'the milkman's ugly'

- 2 Personal verbal abuse, comments on behaviour, e.g., shouldn't do that or say that
- 3 Personal verbal abuse relating to self concept, e.g., 'you're lazy, ugly, mad, perverted'
- 4 Personal threats to self, e.g., threats to harm self or family, extreme instructions or commands to harm self or others

**8 Amount of distress**

- 0 Voice not distressing at all
- 1 Voices occasionally distressing, majority not distressing (<10%)
- 2 Minority of voices distressing (<50%)
- 3 Majority of voices distressing, minority not distressing (≥50%)
- 4 Voices always distressing

**9 Intensity of distress**

- 0 Voices not distressing at all
- 1 Voices slightly distressing
- 2 Voices are distressing to a moderate degree
- 3 Voices are very distressing
- 4 Voices are extremely distressing, feel the worst he/she could possibly feel

**10 Disruption to life caused by voices**

- 0 No disruption to life, able to maintain social and family relationships
- 1 Voices cause minimal amount of disruption to life, e.g., interferes with concentration although able to maintain daytime activity and social and family relationships and be able to maintain independent living without support
- 2 Voices cause moderate amount of disruption to life causing some disturbance to daytime activity and/or family and social activities. The patient is not in hospital although may live in supported accommodation or receive additional help with daily living skills
- 3 Voices cause severe disruption to life so that hospitalisation is usually necessary. The patient is able to maintain some daily activities, self-care and relationships whilst in hospital. The patient may be in supported accommodation but experiences severe disruption of life in terms of activities and social relationships. Self-care is also severely disrupted
- 4 Voices cause complete disruption of daily life requiring hospitalisation. The patient is unable to maintain any daily activities and social relationships. Self-care is also severely disrupted.

**11 Controllability**

- 0 Subject believes they can have control over the voices and can always bring on or dismiss them at will
- 1 Subject believes that they have some control over the voices on a number of occasions
- 2 Subject believes they can have some control over their voices approximately half of the time
- 3 Subject believes they can have some control over the voices but only occasionally. The majority of the time the subject experiences voices which are uncontrollable
- 4 Subject has no control over when the voices occur and cannot bring on or dismiss them at all

## APPENDIX 7

The revised Beliefs About Voices Questionnaire (BAVQ-R)



## **BAVQ - R**

There are many people who hear voices. It would help us to find out how you are feeling about your voices by completing this questionnaire. Please read each statement and tick the box which best describes the way you have been feeling in the *past week*.

If you hear more than one voice, please complete the form for the voice which is dominant.

Thank you for your help.

Name: .....

Age: .....

|    |  | Disagree | Unsure | Slightly Agree | Strongly Agree |
|----|--|----------|--------|----------------|----------------|
| 1  | My voice is punishing me for something I have done               |          |        |                |                |
| 2  | My voice wants to help me  |          |        |                |                |
| 3  | My voice is very powerful  |          |        |                |                |
| 4  | My voice is persecuting me for no good reason                    |          |        |                |                |
| 5  | My voice wants to protect me                                     |          |        |                |                |
| 6  | My voice seems to know everything about me                       |          |        |                |                |
| 7  | My voice is evil   |          |        |                |                |
| 8  | My voice is helping to keep me sane                              |          |        |                |                |
| 9  | My voice makes me do things I really don't want to do            |          |        |                |                |
| 10 | My voice wants to harm me  |          |        |                |                |
| 11 | My voice is helping me to develop my special powers or abilities |          |        |                |                |
| 12 | I cannot control my voices                                       |          |        |                |                |
| 13 | My voice wants me to do bad things                               |          |        |                |                |
| 14 | My voice is helping me to achieve my goal in life                |          |        |                |                |
| 15 | My voice will harm or kill me if I disobey or resist it          |          |        |                |                |

|    |   | Disagree | Unsure | Slightly Agree | Strongly Agree |
|----|---|----------|--------|----------------|----------------|
| 16 | My voice is trying to corrupt or destroy me |          |        |                |                |
| 17 | I am grateful for my voice                  |          |        |                |                |
| 18 | My voice rules my life                      |          |        |                |                |
| 19 | My voice reassures me                       |          |        |                |                |
| 20 | My voice frightens me                       |          |        |                |                |
| 21 | My voice makes me happy                     |          |        |                |                |
| 22 | My voice makes me feel down                 |          |        |                |                |
| 23 | My voice makes me feel angry                |          |        |                |                |
| 24 | My voice makes me feel calm                 |          |        |                |                |
| 25 | My voice makes me feel anxious              |          |        |                |                |
| 26 | My voice makes me feel confident            |          |        |                |                |

When I hear my voice, usually ...

|    |   | Disagree | Unsure | Slightly Agree | Strongly Agree |
|----|---|----------|--------|----------------|----------------|
| 27 | I tell it to leave me alone                                 |          |        |                |                |
| 28 | I try and take my mind off it                               |          |        |                |                |
| 29 | I try and stop it   |          |        |                |                |
| 30 | I do things to prevent it talking                           |          |        |                |                |
| 31 | I am reluctant to obey it                                   |          |        |                |                |
| 32 | I listen to it because I want to                            |          |        |                |                |
| 33 | I willingly follow what my voice tells me to do             |          |        |                |                |
| 34 | I have done things to start to get in contact with my voice |          |        |                |                |
| 35 | I seek the advice of my voice                               |          |        |                |                |

## APPENDIX 8

### Ethical Approval - Derby

**Southern Derbyshire  
Local Research Ethics Committee**

Health Authority

Derwent Court  
Stuart Street  
Derby  
DE1 2FZ

Chairman: Dr A W A Crossley MB ChB FRCA

Administrator: Jenny Hancock ext 6209 (direct dial from Derby hospitals 16-6209)

Direct fax: 01332 363963

email: jenny.hancock@mail.sderby-ha.trent.nhs.uk

Tel: 01332 626300

Fax: 01332 626350

20 July 2000

Mr Mark Hayward  
42 Bishop's Drive  
Oakwood  
DERBY  
DE21 2BA

Dear Mr Hayward

**SDLREC REF: 0006/182**

**INTERPERSONAL PROCESSES AND AUDITORY HALLUCINATIONS: AN EXPLORATION  
OF THE INFLUENCE OF GENERAL RELATING STYLE UPON THE RELATIONSHIP WITH  
THE VOICE**

Further to conditional approval of this study by the Southern Derbyshire Local Research Ethics Committee, thank you for letting me have a copy of your supporting information.

I confirm that full SDLREC approval is now granted on the understanding that you will follow the protocol as agreed. However before commencing the study, final approval must be obtained from the management of the appropriate Trust(s).

Please note that the committee will require:

- to be advised immediately of any adverse report or changes to the protocol or if the trial is abandoned;
- a progress report on an annual basis or at the end of the trial if this is a lesser time;
- copies of all published reports.

For your information, the SDLREC complies with the ICH Harmonised Tripartite Guidelines for Good Clinical Practice. In line with Department of Health guidance it has an executive sub committee which meets twice a month specifically to consider MREC-approved applications.

**Please quote the SDLREC reference number (shown above) in all future correspondence on this study.**

Yours sincerely

A W A Crossley  
Chairman  
Southern Derbyshire Local Research Ethics Committee

cc Dr T Grieve, R & D Manager, DCGH  
Chief Executive: Michael Marchment  
health.demon.co.uk

## APPENDIX 9

### Ethical Approval – Nottingham



Queen's Medical Centre  
Nottingham

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Research and Development Directorate

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Please ask for: Janet Boothroyd, Business Manager, Ext. 44307  
Ruth Doyle, Data Manager, Ext. 44771  
Linda Ellis, Administrative Assistant, Ext. 41049  
Debbie Cocks, Secretary/Administrator Ext. 35117

Our Ref: EX060004

5<sup>th</sup> September 2000

Mr M Hayward  
Department of Applied Psychology (Clinical Section)  
University of Leicester  
University Road  
Leicester  
LE1 7RH

Dear Mr Hayward

Re: Interpersonal Processes and auditory hallucinations: An exploration of the influence of general relating style upon the relationship with the voice.

Thank you for submitting the above project for consideration by the Ethics Committee. The Committee met on the 4<sup>th</sup> September 2000 and is happy to approve the project including the protocol, information sheet, and consent form.

The Ethics Committee requires that:

- i) Serious adverse reaction/events, which occur during the course of the project, are reported to the Committee.
- ii) Changes in the protocol are submitted as project amendments to the Committee.
- iii) Yearly reports and a final report on the project to be submitted. (Forms will be sent to Lead Investigator for completion).

Kind regards

Yours sincerely

Dr I M Holland  
Honorary Secretary  
Ethics Committee

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Dr Ian Holland, Honorary Secretary, Ethics Committee  
Queens Medical Centre, Nottingham, University Hospital NHS Trust

## **APPENDIX 10**

### **Participant Information Sheet**

March 2000 (Version1)

### Participant information sheet

#### Study title

A study examining the relationships that people develop with the voices that they hear

#### Invitation paragraph

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with friends, relatives and your GP if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

#### What is the purpose of the study?

This study is trying to find out more about peoples' experience of hearing voices. In particular, it is interested in the relationships that people develop with the voices. Are these relationships mainly positive or negative? Are they similar to the relationships that are developed with people in the hearer's social network? Does the type of relationship influence the amount of distress that the voices cause?

This study will run from October 2000 until July 2001.

#### Why have I been chosen?

I am interested in speaking with you because: 1) you have heard voices for at least six months; and 2) your Consultant Psychiatrist thought you might like to participate.

In total, approximately 35 people will participate in the study.

#### Do I have to take part?

It is up to you to decide whether or not to take part. If you decide to take part you will be given this information sheet and asked to sign a consent form. If you decide to take part you are free to withdraw at any time, without giving a reason. This will not affect the care you receive. Neither will a decision not to participate.





### What will happen to me if I take part?

You will be asked to complete a short interview about the voices that you hear and a maximum of five questionnaires. This can be done at a time and place most convenient to you. Once the interview and questionnaires have been completed you will be required to do nothing else.

### What are the advantages and disadvantages of taking part?

There are no anticipated disadvantages to taking part in the study. However, if you wanted to stop the interview or discontinue the questionnaires for any reason, you would be free to do so immediately.

It is hoped that the study will contribute to a greater understanding of voices and improved treatment for people who hear them. If you would be interested in the results of the study I will be happy to share them with you at a later date.

### Confidentiality

All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you which leaves the department will have your name and address removed so that you cannot be recognised from it.

### What will happen to the results of the study?

The results of the study will be written-up by July 2001 and submitted to my course of study in Clinical Psychology at the University of Leicester. Subsequent attempts will be made to publish the results in a psychology journal. No participant will be identified in any part of the write-up.

### Who has reviewed the study?

This study has been reviewed and approved by the Research Ethics Committee at Queens Medical Centre.

### Contact for further information

If you require further information about any aspect of the study, please contact me at the following address and 'phone number:

Mark Hayward  
Clinical Psychologist in training  
600 Wells Road  
Nottingham

0115 9691300 extention 40623

If you decide to participate in the study you will be given a copy of the information sheet and a signed consent form to keep.

## APPENDIX 11

### Descriptive data for the Psychotic Symptoms Rating Scale (PSYRATS)

Descriptive data for the Psychotic Symptoms Rating Scale (PSYRATS)

| <b>Scale</b>               | <b><i>N</i></b> | <b>Mean</b> | <b>Std. Deviation</b> |
|----------------------------|-----------------|-------------|-----------------------|
| Frequency of voices        | 27              | 2.52        | 1.19                  |
| Duration of voices         | 27              | 2.78        | 1.25                  |
| Loudness of voices         | 23              | 2.35        | 0.93                  |
| Amount of negative content | 27              | 2.70        | 1.27                  |
| Degree of negative content | 27              | 3.30        | 1.32                  |
| Intensity of distress      | 27              | 2.56        | 1.19                  |
| Amount of control          | 26              | 2.85        | 1.38                  |

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